UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

GRACE BOZICK,

Plaintiff,

-v-

CONAGRA FOODS, INC., et al.,

Defendants.

19-cv-4045 (LJL)

OPINION AND ORDER

LEWIS J. LIMAN, United States District Judge:

Defendants Conagra Foods, Inc. and Conagra Brands, Inc. (collectively, "Defendants" or "Conagra") move for summary judgment on the claims brought by plaintiff Grace Bozick ("Plaintiff" or "Bozick") against them. Dkt. No. 92. Defendants also move to exclude the testimony of four of Plaintiff's expert witnesses: Lester Hendrickson, Thomas Eagar, Gregory J. Cahanin, and William Kitzes. Dkt. Nos. 77, 80, 83, 86. Plaintiff, in turn, moves to exclude the testimony of four of Defendants' expert witnesses: Nathan Dorris, Sarah Easley, Roch Shipley, and Sean Dee. Dkt. No. 87.

For the following reasons, the motion for summary judgment is granted in part and denied in part. Defendants' motions to exclude the testimony of Hendrickson, Eagar, and Kitzes are granted in part and denied in part without prejudice. Defendants' motion to exclude the testimony of Cahanin is denied without prejudice. Plaintiff's motion to exclude the testimony of Defendants' expert witnesses is granted in part and denied in part without prejudice.

BACKGROUND

I. The September 11, 2018 Incident

This case revolves around a September 11, 2018 incident wherein Plaintiff sustained severe burn injuries while cooking in her residential kitchen. The fact that Plaintiff sustained severe burn injuries and that a can of PAM cooking spray in her kitchen everted are undisputed. The causes of the fire are very much disputed.

Plaintiff is the only witness to the events that resulted in her burns. Plaintiff testified that on September 11, 2018, she was alone in her apartment, where she planned to cook steak after work; she began to cook at approximately seven-thirty to eight o'clock in the evening. Dkt. No. 94 ("Conagra's 56.1") ¶¶ 29–30; Dkt. No. 104 ("Bozick's 56.1 Response") ¶¶ 29–30. According to Plaintiff, she took a can of PAM cooking spray (the "Subject Can"), which she had purchased from Amazon.com on February 21, 2017 and had used consistently since then, from her cabinet "and sprayed [her] pan, and then [] put the steak in the pan, and seasoned the steak with Worcestershire sauce and started to cook the steak, and left—put the Pam on the counter beside the steak." Conagra's 56.1 ¶¶ 26, 28, 31 (quoting Conagra's 56.1, Ex. 11 at 51:9–20); Bozick's 56.1 Response ¶¶ 26, 28, 31. She testified that she placed the Subject Can on the countertop in the location marked with an "X" in the photograph below, which one of her experts, Hendrickson, estimates was about seven inches from the edge of the stove and thirteen inches from the center of the burner:

Conagra's 56.1 ¶ 32; Bozick's 56.1 Response ¶ 32. Plaintiff testified that after spraying the pan with PAM and placing the PAM on the countertop, she turned the left front burner of the stove on "HI," cooked the steak for about six to eight minutes, and then turned the burner off. Conagra's 56.1 ¶¶ 33–35; Bozick's 56.1 Response ¶¶ 33–35. She then put water in the pan with soap and turned the burner back on to "LO" to assist with cleaning the pan; she estimates that the burner was off for one to five minutes before she turned it back on. Conagra's 56.1 ¶ 36; Bozick's 56.1 Response ¶ 36. Plaintiff then left the kitchen, ate her steak, and returned to the kitchen after approximately five minutes. Conagra's 56.1 ¶ 37; Bozick's 56.1 Response ¶ 37. When she walked back into her kitchen, there was an "explosion"; Plaintiff testified that she saw fire from the PAM can. Conagra's 56.1 ¶¶ 38–39; Bozick's 56.1 Response ¶¶ 38–39.

Plaintiff testified that immediately after she was burned, she pressed a button a few steps outside her door that alerted the building's doorman who came to help her; she then took a taxi to the hospital instead of an ambulance because she thought it would be faster and easier. Bozick's

56.1 Response ¶ 47. The doorman partially cleaned Plaintiff's kitchen while she was in the hospital, and no photographs were taken of the kitchen area before it was cleaned. Conagra's 56.1 ¶ 48; Bozick's 56.1 Response ¶ 48.[1]

Plaintiff testified that immediately following the incident, before leaving to go to the hospital, she called her brother, Jay Bozick; the brother testified that she told him "there's been a terrible accident, she had an explosion of Pam can." Conagra's 56.1 ¶ 44 (quoting Conagra's 56.1, Ex. 12 at 17:24–20:12); Bozick's 56.1 Response ¶ 44. He testified that at the hospital, she explained to him that "she cooked her steak and came back, and when she came back, the PAM – the can exploded." Conagra's 56.1 ¶ 45 (quoting Conagra's 56.1, Ex. 12 at 25:13–24); Bozick's 56.1 Response ¶ 45.

The hospital intake notes state the following regarding the reasons for Plaintiff's burns:

- "Pt was cooking diner [sic] in the over [sic] around 7pm 9/11 and while she opened the stove it 'blew up'";
- "She is unsure if water from the pot burned her or if her hand caught fire";
- "She reported that hot grease silled [sic] onto her right hand and wrist. Also splashed on right cheek."; and
- "Pt. is uncertain if her hand caught fire or if the burn is from water in a pot she [sic] soaking on the stove in an attempt to clean it."

Conagra's 56.1 ¶ 46 (quoting Conagra's 56.1, Ex. 11, Deposition Exs. I, J, K, and L). Plaintiff disputes the accuracy of those notes, stating that she "didn't say that," "doesn't recall that," "was in shock," and was "crying" and "screaming" at the hospital and was given pain medicine "to try to calm [her] down." Bozick's 56.1 Response ¶ 46 (quoting Dkt. No. 106, Ex. 1 at 126:19, 132:2–5, 75:5–9).

[1] The doorman has not been interviewed and deposed because he died before his deposition—which was postponed due to COVID-19—could occur. Conagra's 56.1 ¶ 49; Bozick's 56.1 Response ¶ 49.

II. The PAM Cooking Spray Product

The critical question in this case is whether the fire and the burns Plaintiff sustained resulted from defects with the can of PAM Original cooking spray sold by Conagra and used by Bozick. The cooking spray was sold by Conagra in a "211 x 713" bottom-vented container manufactured by DS Containers, Inc. ("DSC"), who is not a party to this case. Conagra's 56.1 ¶¶ 1–2; Bozick's 56.1 Response ¶¶ 1–2. The bottom-vented can includes a pressure relief mechanism in which the can will buckle (or evert its bottom) when the contents are put under too much pressure. When the can buckles, four U-shaped score lines on the can's bottom open (or "vent"), releasing the pressure and the can's contents. Conagra's 56.1 ¶ 3; Bozick's 56.1 Response ¶ 3. DSC has quality assurance procedures in place that include the testing of a can off the production line every half hour to ensure that it does not buckle and vent at a pressure under 180 PSI; the test results are recorded by a technician performing the test. Conagra's 56.1 ¶ 24; Bozick's 56.1 Response ¶ 24. Conagra utilized this bottom-vented container for twelve-ounce PAM Original cans, as well as certain other larger-sized cooking spray products, from approximately 2012 to 2019, including during the time Plaintiff's can was manufactured; during this time, Conagra purchased approximately 132 million of these bottom-vented containers from DSC for use in cooking spray products sold by Conagra. Conagra's 56.1 ¶ 5; Bozick's 56.1 Response ¶ 5.

The PAM cooking spray at issue in this case contains a mixture of canola oil, palm oil, coconut oil, and other minor ingredients, as well as a liquified hydrocarbon food-grade propellant to dispense the spray, called A-70, which is comprised of a roughly equal mixture of propane and isobutane. Conagra's 56.1 ¶ 6; Bozick's 56.1 Response ¶ 6. There are two phases inside the can: (1) a liquid phase, containing the mixture of oils and the propellant in a liquid phase, and (2) a vapor phase, containing the propellant in a hydrocarbon gas phase. Conagra's

56.1 ¶ 7; Bozick's 56.1 Response ¶ 7. Hydrocarbon propellants, including A-70, are used in a variety of consumer products including cooking spray; personal care products such as deodorant, hairspray, and perfumes; insecticides; paints; and air fresheners. Conagra's 56.1 ¶ 8; Bozick's 56.1 Response ¶ 8.

There is a thermodynamic equilibrium relationship between the temperature and vapor pressure inside a can of PAM cooking spray. Conagra's 56.1 ¶ 11; Bozick's 56.1 Response ¶ 11. As the temperature of the PAM cooking spray contents increases, the pressure inside the container increases, and as the temperature of the contents decreases, the pressure inside the container decreases. Conagra's 56.1 ¶ 11; Bozick's 56.1 Response ¶ 11. The temperature–pressure relationship for PAM cooking spray has been measured in several studies, the results of which are set forth in the graph below:

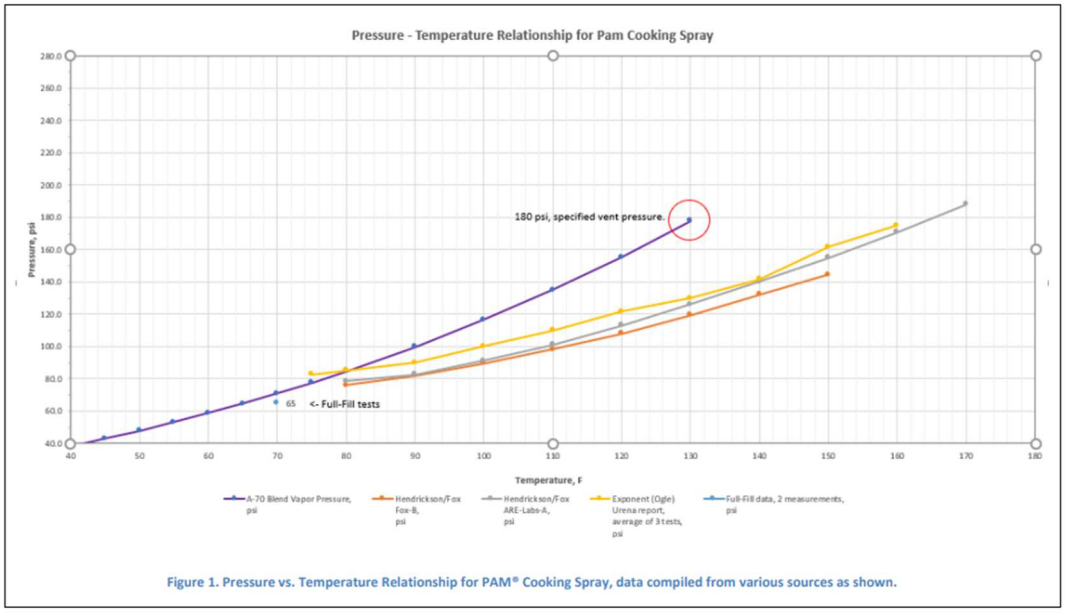

Figure 1. Pressure vs. Temperature Relationship for PAM® Cooking Spray, data compiled from various sources as shown.

Conagra's 56.1 ¶ 12; Bozick's 56.1 Response ¶ 12.

PAM cooking spray includes the following caution statements and warning labels:

- "CAN MAY BURST IF LEFT ON STOVE OR NEAR HEAT SOURCE";
- "CONTENTS UNDER PRESSURE";

- "DO NOT STORE ABOVE 120°F";
- "STORE AT ROOM TEMPERATURE"; and
- "FLAMMABLE."

Conagra's 56.1 ¶ 19; Bozick's 56.1 Response ¶ 19.

III. The Experts' Opinions

A. Plaintiffs' Experts

1. Lester Hendrickson

Plaintiff offers the report and testimony of Dr. Lester Hendrickson, Ph.D., who was retained by Plaintiff's counsel to provide technical expertise in determining the root cause of the venting of the PAM can and the associated explosion. Dkt. No. 79-2 ("Lester Report") at 1. Hendrickson has B.S., M.S., and Ph.D. degrees in metallurgical engineering, with a minor in physics. *Id.* His principal occupation for twenty-seven years was as a professor on the faculty of the College of Engineering and Applied Science at Arizona State University; he taught as a professor emeritus for another thirteen years before retiring, and he still holds that title. *Id.* Hendrickson has participated as an expert in three prior cases involving PAM Original cooking spray and "substantially similar incidents," where the plaintiff in each case testified "that the can of PAM was on a countertop adjacent to a gas stove when it suddenly and unexpectedly exploded resulting in a flash fire." *Id.* at 2.

Hendrickson's report begins with a description of the "subject cannister" of PAM. *Id.* He describes the warning labels on the can, noting that the warning label "states that the can may 'burst' if left on the stove or near heat source," but "fails to state that if the can 'bursts,' an explosion of its FLAMMABLE contents will occur almost simultaneously with the 'burst.'" *Id.* He also highlights that the label includes a warning against spraying near open flame, but "does not identify the consequences of doing so, and is not in compliance with [American National

Standards Institute ("ANSI")] Z535.4, the standard for warning labels." *Id.* He describes that the photographs of the Subject Can show that "the bottom of the can is convex in shape," even though "[t]he shape of the bottom of the can, as manufactured, is concave with U-shaped score marks that are introduced at the time of manufacture and are intended to serve as 'vents' when the internal pressure of the can reaches a nominal 180 psig." *Id.* at 3. He notes that "[t]he fact that these 'vents' are open is evidence that in fact the contents of the can escaped through the vents due to pressure internal to the can." *Id.* Hendrickson further describes the labels on the can, noting that one "identifies the contents of the canister, which includes a 'Propellant,'" but "fails to identify the propellant." *Id.* He identifies it as "A-70," which he describes as "an approximately 50/50 molar mixture of liquified propane and isobutane based on [his] experience with identical or substantially similar cans." *Id.* Next, Hendrickson describes a label where "[t]he marking DOT 2Q is listed." *Id.* Hendrickson states that this "implies that the product was manufactured without a DOT Special Permit," although he does not explain what that is.[2] *Id.* He adds that "these cans however, contain scores on the bottom which are not permitted under 49 CFR[] § 173.306," and that his "experience also includes the information that the DOT will not relax any of the requirements for aerosol cans of this type and size when they contain a flammable propellant." *Id.* at 3–4. He describes two DOT special permits issued to Conagra and DSC and opines that they allow for "nonflammable compressed gas" and nonflammable aerosols, and therefore concludes that "[u]sing a flammable liquified petroleum gas as a propellant would be in violation of this special permit and a fire and explosion hazard" and that

[2] Hendrickson's report does not provide any context for his statements and opinions regarding "DOT" standards and permits. The relevant portion of the Code of Federal Regulations outlines hazardous materials regulations from the Department of Transportation ("DOT").

"Conagra was shipping highly flammable Pam Original cooking spray in violation of DOT safety regulations." *Id.* at 4.

Hendrickson also offers an analysis of the way in which the "scores" on the bottom of the can are designed to function and do in fact function. He states that "the internal pressure at which the bottom of the canister is to evert from concave to convex is specified by design as 180 psig nominal," and that "[i]n the process of everting, the scores open, and the internal pressure forces the contents to flow rapidly through the openings." *Id.* at 9. He states that "[w]hen canisters 'vent' while resting on a countertop adjacent to a gas range with a burner or burners ignited, the canister must have vented at a pressure significantly less that [sic] the design pressure of 180 psig." *Id.* He also explains that "[t]he pressure required to evert the bottom, and vent the canister, is a sensitive function of the thickness of the metal from which the bottom is manufactured, as well as the modulus of elasticity of the particular steel," and that he has "performed a Computer Aided Analysis that shows a small variation in thickness can reduce the stability of the concave bottom and appreciably lower the internal pressure required to cause the can to evert." *Id.* at 8–9. He adds that "[d]estructive tests done by in [sic] independent testing laboratory on a PAM Original spray cooking oil canister that is claimed to have vented and exploded while sitting on a counter adjacent to an ignited gas burner, had locations where the thickness of the bottom was less than that specified in the design and manufacture of the canister,"[3] and that "[s]uch evidence supports an opinion that this canister was defective in manufacture." *Id.* at 9.

[3] The destructive testing in this case was performed pursuant to the Court's November 30, 2020 order. Dkt. No. 56. Defendants had requested that an independent laboratory examine the Subject Can and measure the thickness of the can bottom to rebut the theoretical possibility that the can buckled because the steel was too thin and it was out of specification. *Id.* at 2. In its November 30 order, the Court permitted "limited destructive testing of the subject can." *Id.* at 4.

Next, Hendrickson conducts a mathematical calculation of the rate of the escape of the contents. *Id.* at 10. He states that, according to a patent for the canisters, "the vents are designed such that the contents flow from the canister at a rate of 4 SCFM (standard cubic feet per minute)." *Id.* Based on this, he calculates:

> A simple calculation shows that the volume of a 12 ounce can of PAM Original is approximately 340.020 cubic feet. Therefore, assuming the canister is filled to the bottom of the upper dome, it contains 0.020 cubic feet of product. When all four vents open, if the product escapes at a rate of 4 cubic feet per second, as listed in the patent, then the time for the entire canister to empty is 0.020 ft^3 divided by 4 ft^3/min equals 0.0050 minutes, which when multiplied by 60 seconds per minute equals 0.30 seconds, which is a small fraction of one second.

Id. Accordingly, he states that "[i]t is my opinion that the four scores in the bottom of 12 ounce PAM canisters, when they open do not 'vent' the contents in controlled fashion as described in the patent reviewed, but rather are equivalent of a 'burst' container." *Id.* He adds that this time is "so fast that it provides no warning in sufficient time for the user to attempt to retreat from the area in proximity to the can to a location far enough away from the explosion to be safe," such that "when the hazard manifests itself, for any reason, those in proximity have no prior warning that they are about to be exposed to the harmful effects of a flash fire." *Id.* He describes what happens "when the contents of the PAM Original container are expelled through the so called 'vents' in 0.30 seconds":

> The contents expelled first are the liquid contents since the scores are on the bottom of the canister, and in contact with the liquid in the canister when the canister is resting on its bottom. The liquid contents contain a large percentage of the propellant, is [sic] the liquefied petroleum gas (LPG) known as A-70 (a mixture of isobutane and propane). When the contents of the container are expelled, it forms an expanding coarse mist of cooking oil interspersed with gaseous propane and isobutane, since the atmospheric pressure is not sufficient to keep either the propane or butane in its liquid state. If this expanding mist hits an open flame or other ignition source, the hydrocarbon propellant instantly ignites the mist into a fireball, and the burning oil-propane and butane mist coats anything and anyone near it

> (including [Plaintiff]) in a manner similar to napalm, causing severe burn injuries and starting secondary fires.
>
> . . .
>
> As the vapor phase of the propellant escapes, because it is not a liquid, it does so at a rate much less that the rate that it escapes through the open scores on the subject PAM can because that propellant escapes in the liquid state, dissolved in the liquid canola oil and other non-flammable contents in the can, and immediately expands by a factor of more than 200 into the vapor phase.

Id. at 11.

Based on all of this information and analysis, Hendrickson offers twenty-two opinions, relating to the "vented" design of the cans, the use of A-70 propellant, the potential safety risks of such designs, design and manufacturing defects in the PAM Original cooking spray can, compliance with DOT specifications, and the adequacy of the warning labels.[4] *Id.* at 11–16.

[4] Many of Hendrickson's opinions reference "Mrs. Ramaj." Specifically, Hendrickson's fourth opinion references "Mrs. Ramaj's injury incidents"; his sixth opinion states that it is "based on documents reviewed relevant to the Ramaj incidents" and references "the PAM can that released its contents in the kitchen of Mrs. Ramaj" and "an extremely hot fire ball that caused Mrs. Ramaj's burn injuries"; his seventh opinion references "the circumstances that transpired in the event that injured Mrs. Ramaj"; his tenth opinion references "the subject PAM can in the Ramaj incident"; his sixteenth opinion references "the subject . . . cans containing PAM spray cooking oil, that exploded and caused severe burn injuries to Mrs. Ramaj"; and his nineteenth opinion references "the subject can containing PAM spray cooking oil involved in the Ramaj injury incident." *Id.* at 11–16. Other of his opinions reference "Ms. Bozick," the plaintiff in this case. Specifically, Hendrickson's thirteenth opinion references "the subject PAM Original container, manufactured with four scores in the bottom, that released its contents and exploded and caused severe burn injuries to Ms. Bozick"; and his twenty-second opinion references "the subject PAM Original can that exploded and caused severe burn injuries to Ms. Bozick." *Id.* It appears that Hendrickson's report here is virtually identical to a report he rendered in connection with a different litigation in the U.S. District Court for the Eastern District of New York, *Ramaj v. Conagra Foods, Inc. et al.*, 1:19-cv-00284-ENV-LB, at ECF No. 113-2. That report appears to have been prepared for similar litigation with a plaintiff named Bardhe Ramaj, and contains the identical twenty-two opinions, including the references to "Mrs. Ramaj" in opinions four, six, seven, ten, sixteen, and nineteen, and the references to "Ms. Bozick" in opinions thirteen and twenty-two. *Id.*

At Hendrickson's deposition on March 18, 2021, Dkt. No. 79-1, he was asked whether he intended to offer the same twenty-two numbered opinions in both cases and confirmed that he did, *id.* at 18:3–7. Hendrickson also noted that to the extent that he interchanged the names of the plaintiffs in the two cases, those were typos. *Id.* at 18:8–12. Accordingly, for the purposes

Hendrickson's first group of opinions relates to the vented design of cans like the one used by Plaintiff, and the associated defects with that design. His first opinion is that these "[a]erosol cans containing 'vents' in the bottom . . . have no useful function to benefit consumers and users of the product when compared to identical cans using an unvented bottom." *Id.* at 12. His second opinion states that DSC "is capable of manufacturing 2Q aerosol cans with non-vented bottoms identical to those with 'vented' bottoms, and has done so in the past and does do so to this date," and that "manufacture of 'vented' cans offers no cost advantage over the non-vented cans." *Id.* Third, Hendrickson opines that "[t]he safety hazard associated with any can filled with PAM spray product containing a highly flammable liquefied gas propellant such as A-70, is that the contents will escape, or be released unexpectedly when unintentionally heated, and the flammable propellant will encounter an ignition source which ignites the propellant into an extremely hot fire ball, exposing anyone in the vicinity to risk of a serious burn injury." *Id.* He contrasts the relative safety of vented cans with unvented cans in this context, stating that "[c]ans with 'vents' in the bottom are designed to release the contents of PAM spray cooking oil when exposed to a heating event, whereas an identical can, absent the 'vents,' exposed to the same heating event will safety retain the contents." *Id.* His fourth opinion, which follows from his third, states that "cans of the twelve-ounce size, containing PAM Original spray cooking oil with propellant A-70, involved in [Bozick's] injury incidents are defective in design and unreasonably dangerous." *Id.* He elaborates in his fifth opinion: "To be specific, it is my opinion that the subject 'vented' cans, based on the DOT specification for 2Q cans, are designed and manufactured to safely retain the contents at any temperature at or below 130°F.

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of this motion, the Court construes Hendrickson's report as referring to the Plaintiff in this case throughout.

Measurements of the internal pressure as a function of temperature for PAM spray cooking oil shows that the true temperature at which the 'vents' are designed to open and allow the contents to escape is a minimum of 160°F. The pressure at which a non-vented 2Q can will burst and release the contents is 270 psi or higher." *Id.*

Hendrickson's next group of opinions relates to the circumstances that caused the explosion that injured Plaintiff. His sixth opinion is that "the PAM can that released its contents in the kitchen of [Plaintiff] did so due to the premature opening of the vents at a temperature substantially less than 130°F, allowing the entire contents to escape within a time of less than one-half (0.5) seconds, followed by an immediate phase change of the liquefied petroleum propellant from the liquid phase to vapor phase, and a volume expansion of 210 to 245 times, allowing the plume of vapor to reach an ignition source and igniting and exploding producing an extremely hot fire ball that caused [Plaintiff's] burn injuries." *Id.* at 13. In his seventh opinion, he opines that "a combination of defects were the root cause of the explosion under the circumstances that transpired in the event that injured [Plaintiff]." *Id.*

He elaborates on those defects in his eighth through sixteenth opinions; these include both manufacturing defects and design defects. In his eighth opinion, he states:

> [T]he primary defect is a design defect associated with the introduction of "U" shaped scores in the bottom of the can, which provide no useful function with respect to utility or performance of the product, and are unnecessary in that the same PAM spray cooking oil is, and has been marketed and sold in the same, or substantially similar cans absent scores in the bottom with no reported incidents of venting, bursting or fire or personal injury from the non-vented design. This defect alone reduced the pressure at which the contents escape from the can from 270 psi or higher, to as low as 125 psi leaving the design with a factor of safety less than one.

Id.

His ninth opinion identifies what he characterizes as a "manufacturing defect, linked to the design which allows a certain percentage, albeit small, of the so called 'vents' to open at a

temperature substantially less than 130°F and an internal pressure substantially less than the design pressure of 180 psig." *Id.* His tenth opinion states that "absent manufacturing defect, which reduced the structural strength of the convex bottom of the subject 'vented' can, and thereby reduced the 180 psig pressure and 160ºF temperature required to evert, or buckle the bottom, open the scores and release the contents of the can in less than one-half second, the subject PAM can in the [Bozick] incident would have safely retained the explosive contents." *Id.* at 13–14.

His eleventh opinion identifies an additional design defect: "failure to specify a tolerance for the nominal thickness of ,0138 [sic] inches for the bottom of the can, and failure to specify a tolerance for the strength of the material used for making the can bottom." *Id.* at 14. He adds, in his twelfth opinion, that "had the same defect present in the subject vented DOT 2Q PAM Original can, existed in a non-vented DOT 2Q can, it would not have reduced the 270 psig, or greater, burst pressure to a pressure below 180 psig." *Id.* In the same vein, his thirteenth opinion states that "had the subject PAM Original container been manufactured absent four scores in the bottom, it would have retained its contents when exposed to the same temperature conditions as the subject PAM Original container, manufactured with four scores in the bottom, that released its contents and exploded and caused severe burn injuries to Ms. Bozick." *Id.*

His fourteenth opinion contrasts the relative safety of vented cans and non-vented cans. He opines that "a non-vented DOT-2Q can in fact offers a greater degree of safety to the consumer than does an identical DOT-2Q can containing 'vents.'" *Id.* He explains that this is because "in a heating event in which a non-vented can is heated to a temperature where the bottom buckles, the non-vented can does not open up and release the liquid contents, but rather the bottom everts to a convex dome," such that "the can loses stability and will tip over," but

"the contents are not released." *Id.* He states that "the can tipping over is a visual notice to the consumer that something is wrong," allowing the consumer to "react appropriately, such as removing the can from any heat source, or moving to a safe location"; he adds that "[o]nly after substantial additional heating does the can reach the burst pressure," while "[i]f no further heating occurs, the contents remain safely in the can." *Id.* In contrast, he states that "[i]n the vented cans, . . . when the bottom buckles, the contents immediately escape rapidly with no prior notice to the consumer thaof aa [sic] potential explosion and flash fire," and that "[i]f the vented mixture reaches an ignition source an explosion will occur instantly and result in severe burn injuries if a person is nearby." *Id.* at 14–15.

Hendrickson's fifteenth opinion is that the design of the PAM Original canister failed to incorporate "the well-known engineering design principle called a 'factor of safety,'" which "should be incorporated into the design of products such as pressure vessels, to allow for unquantifiable variations, either anticipated or unanticipated, from the specified dimensions or material properties to assure that any such variations do not have a detrimental effect on the safe performance of the product." *Id.* at 15. Along the same lines, his sixteenth opinion is that the canister at issue "was defective in design because the designer failed to incorporate into the design, a 'factor of safety' sufficient to assure the subject cans would perform safely as expected by a normal consumer, when used as intended or in a reasonably foreseeable manner." *Id.*

Hendrickson's next five opinions all relate to his broader opinion that the PAM Original cooking spray canisters did not comply with DOT standards and were not encompassed by either of the special permits obtained by Conagra and DSC. He concludes, in his twenty-first opinion, that "had the Pam containers been truly designed and manufactured to meet DOT standard 2Q, then they would have been safe for transportation and safe for use in a kitchen." *Id.* at 16.

Finally, in his twenty-second opinion, Hendrickson states that "the 'WARNING' label on the subject PAM Original can that exploded and caused severe burn injuries to Ms. Bozick does not meet the requirements of ANSI Z535.4. American National Standard for Product Safety Signs and labels, and therefore contains a warnings defect." *Id.*

Defendants conducted a deposition of Hendrickson on March 18, 2021. Dkt. No. 79-1.

2. Thomas Eagar

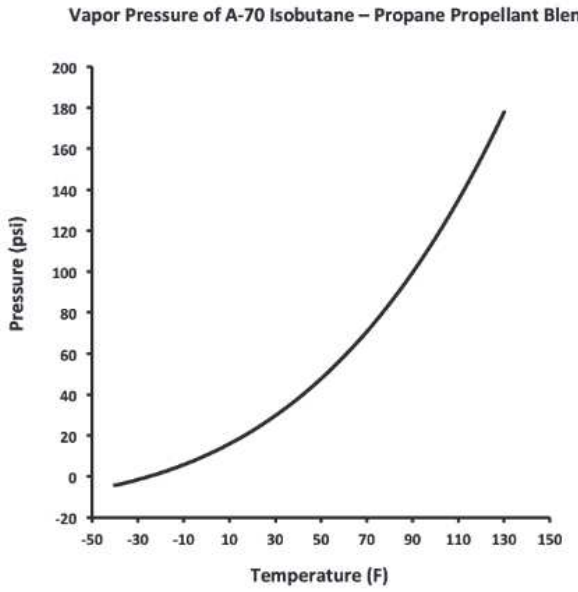
Second, Plaintiff offers the report and testimony of Dr. Thomas Eagar, who was retained by Plaintiff to investigate the failure of containers of PAM Original cooking spray and other branded cooking sprays with pressure relief U-shaped score lines sold by Conagra, including reviewing the design of these aerosol containers with the U-shaped pressure relief score lines to determine if the PAM Original cooking spray that employed these vents was safe for use in a kitchen environment. Dkt. No. 82-5 ("Eagar Report") at 1. Eagar has a bachelor's and Doctor of Science degrees in metallurgy from the Massachusetts Institute of Technology ("MIT"). He has been a faculty member at MIT for the past forty-four years; his current title is Professor of Materials Engineering and Engineering Management.[5] *Id.* at 5. At MIT, he has published and taught about manufacture of metal parts, metals fabrication, thermodynamics, combustion, failure analysis, and structural materials design, and in his work with industry, he has consulted on selection of materials, manufacturing, quality control, total quality management, and non-destructive testing. *Id.* He has experience with engineering consulting as well, including

[5] Eagar was assisted in the preparation of his report by Michael Tarkanian who is a member of MIT's Department of Materials Science and Engineering teaching staff and has both a bachelor's degree and master's degree from MIT in materials science and engineering. *Id.* at 5. He was also assisted by Dr. Neil T. Jenkins who has a bachelor's degree and doctorate degree in materials science and engineering at MIT. *Id.* at 6.

design consultation, failure analysis, and rehabilitation of structures, and has investigated the rupture of pressure-containing vessels on several occasions. *Id.*

Eagar's report states that the dispute concerns "a patented method for the pressure relief of aerosol containers and whether it improves the safety of using the product." *Id.* at 7. He states that the pressure relief method in PAM cans was originally used in Reddi-Wip containers, which were manufactured using a non-flammable aerosol propellant (nitrous oxide) and that permission to use such technology was granted even though it reduced the pressure to breach the container wall to 180 PSI because it would allegedly release pressure in a controlled manner. *Id.* Eagar notes that Conagra decided to use this technology also for PAM Original cooking spray, although it used a hazardous propellant instead of the non-hazardous propellant of nitrous oxide. *Id.* Eagar concludes that: "Our analysis indicates that the patented technology is not controlled when a flammable propellant is used in the aerosol container, resulting [in] a very hazardous release of flammable gas." *Id.* at 8.

The report then outlines the equilibrium analysis that Eagar conducted. *Id.* He notes that he plotted the pressure/temperature equilibrium for the propellant blend that is contained in the PAM containers. *Id.* That analysis is represented below:



After outlining the equilibrium analysis, Eagar then offers eleven numbered opinions as well as proposed alternative safer designs. Opinion one states that "[t]here is substantial evidence that the containers buckle and release pressure catastrophically below 180 psi." *Id.* at 11. This opinion, Eagar notes, is based on a Weibull analysis, which Eagar states is "commonly used to assess product reliability, analyze life data and model failure times." *Id.* at 11–12 n.35. The Weibull analysis involves the use of statistics to determine the probability of low frequency events, and it was employed by Eagar as he claims that it "is impractical to physically test millions of containers." *Id.* at 12. The dataset for that analysis was comprised of the pressures at which sixteen different containers failed by buckling. *Id.* at 32. As part of that analysis, Eagar found that nine containers out of a population of 132 million containers "will fail at 105 F° which is well within the expected temperature near a stove in a kitchen." *Id.* In addition, the analysis showed that "there is a one in 7 probability that the next container tested would fail below 180 psi." *Id.* at 13. Eagar notes that he performed his analysis based on the "Ramaj" container data set and that while a "request has been made for the Bozick data set, [] it has not

been received." *Id.* at 15. Eagar also notes that the Weibull methodology was used because "it is not possible to locate a manufacturing defect on a buckled bottom dome" as once that occurs "precision measurements" are impossible. *Id.*

The second opinion states that "[p]ressure relief of the container with the U-shaped lines of weakness does not produce a controlled release of the product." *Id.* Eagar bases this opinion on the fact that such a release is neither controlled nor safe when the propellant is a flammable gas. *Id.* at 16. Third, Eagar opines that "[t]esting the buckle pressure of 35 containers per hour is an insufficient sample to determine the probability of pressure relief in lots consisting of 15,000 containers." *Id.* at 18. Eagar states that the physical testing of "35 containers per hour from the 6 production lines is an insufficient number of samples from which to extrapolate the properties of a sample lot." *Id.* at 19. Fourth, Eagar opines based on his reading of the relevant patent that "once the bottom dome buckles and everts, the fracture and pressure release is designed to follow" and "cannot be stopped. *Id.* Fifth, Eagar opines that the "use of pressure relief lines of weakness that intentionally weaken a container that contains a Category 1 flammable propellant is a design defect as it reduces the safety of the product with no measurable benefit." *Id.* at 21. He notes that while the patent states that the objects of the invention are to prevent a can from bursting by venting the pressure before it does so and to release all contents safely, it does neither of these things particularly where the propellant is flammable material. *Id.* at 21–22. He notes: "Making the container weaker by introducing lines of weakness that release the propellant catastrophically at 180 psi rather than 270 psi makes the container less safe—not safer." *Id.* at 23. In opinion six, Eagar states that there is no "method of distinguishing a press-relief buckle from a burst when the propellant" is a flammable. *Id.* at 25. Eagar's seventh and eighth opinions concern Full-Fill Industries Hot Tank Testing. *Id.* at 24–25.

Eagar's ninth and tenth opinions concern the potential for a Boiling Liquid Collapsed Bubble Explosion ("BLCBE"). *Id.* at 25–26. His ninth opinion is that the mixture of cooking oil and hydrocarbon is susceptible to a BLCBE. He bases this opinion on the fact that "[i]f the canola oil product and A-70 propellant changes the buckling pressure due to changes in the chemical thermodynamic activity of the A-70 propellant, then the equilibrium Weibull analysis performed above would need to be shifted upward by 5 degrees Fahrenheit." *Id.* at 25. He continues "[r]ecognizing this, a non-equilibrium process that would cause buckling with subsequent catastrophic pressure release, rather than a purely equilibrium process was hypothesized." *Id.* He likens this to a can of carbonated soda with the carbon dioxide dissolved in the water, which is then shaken and explodes once opened. *Id.* Opinion ten similarly concludes that the instruction to "shake well" before the use of PAM as well as the process of then spraying the product from the container sets up the pressure waves necessary to produce a BLCBE. *Id.* at 27.

In his final opinion, Eagar opines that the containers did not follow Good Manufacturing Practices as required by the Food and Drug Administration. *Id.* at 27–28.

Eagar also makes proposals for an alternative safer design. *Id.* at 28. Those proposals are:

- The same container with no U-shaped lines of weakness that weaken the container bottom inducing eversion;
- Use of a pump spray container for oil, which would eliminate the need for a flammable propellant;
- Use of a non-flammable propellant such as carbon dioxide;
- "Use of a pressure relief valve of the type found in propane cylinders instead of using the U-shaped lines of weakness."

Id.

On March 3, 2021, Eagar submitted a rebuttal report. Dkt. No. 82-6. In that report, Eagar largely responds to claims by Defendants' experts that the Weibull data set was a poor fit and to claims that the BLCBE was not the cause of the explosion. *Id.* Eagar did, however, attempt to offer one new opinion in that report. In rebuttal opinion six, Eagar states that while one of Defendants' experts had provided "proof that the containers met the design specifications," this was not the issue in question. *Id.* at 11. He opined that the decrease in thickness that occurs during the can-forming process of all cans impacted the Subject Can differently than the exemplar cans and is less pronounced in the exemplar cans than in the Subject Can. He states that the can-forming process "introduces a weakness in the buckling strength of the bottom of the dome" of the Subject Can, but not the exemplar cans, "that reduces the failure pressure and temperature by 60 psi and 60 F" allowing the can to buckle at a temperature as low as 110-120 F. *Id.* at 15. On March 30, 2021, this Court struck the sixth opinion in the rebuttal report as a late disclosure. Dkt. No. 68. On April 12, 2021, Eagar was deposed by Defendants. Dkt. No. 82-1.

3. Gregory J. Cahanin

Third, Plaintiff offers the expert report and testimony of Gregory J. Cahanin, who was retained to determine the causes of the fire in the Bozick home on September 11, 2018. Dkt. No. 85-1 ("Cahanin Report") at 9. Cahanin has a master's degree in public administration from Golden Gate University, a bachelor's degree in fire protection & safety engineering technology from Oklahoma State University; an associate's degree in fire and safety technology from Oklahoma State University; and an associate's degree in fire science technology from Springfield (MA) Technical Community College. *Id.* at 2. Cahanin works as an independent consultant and testifying fire expert at Cahanin Fire & Code Consulting, a sole proprietorship, since 1992. *Id.* at 1. Over the last forty-four years, he has practiced fire protection engineering

in various positions, including Senior Life Safety Engineer at the National Fire Protection Association. *Id.* He currently serves on the International Code Council's Reference Standards Committee, the NFPA[6] Life Safety Code Technical Committee on Fire Protection Features, among other committees. *Id.* He also has served on the NFPA Fire Doors and Windows Committee and the NFPA Glossary of Terms Committee as a committee member in addition to serving on sixteen NFPA Technical Committees as secretary. *Id.* at 1–2. Cahanin has also served as a fire code consultant for property owners and architects and as a subject matter expert on matters relating to fire origin and cause, fire building code compliance, and fire systems design and operation, and has testified in state and federal courts on matters relating to fire growth, protection, prevention, and suppression. *Id.* at 2.

Cahanin's report begins with a summary of the facts he considered, including the above-described report by Plaintiff of the events surrounding the September 11, 2018 incident. His report, which is based on a review of materials including photographs of the location taken during a physical examination of the incident premises on October 21, 2020, *see* Dkt. No. 96 at 3, adds additional information about the scene of the incident. He describes that the ten-inch-wide section of counter on which Plaintiff testified that she placed the PAM canister is made of wood and is about one inch thick and twenty-four inches deep and "is painted as opposed to having a laminate surface like the adjacent sink counter." Cahanin Report at 6. He describes that "[t]he heat of the explosion, combined with the oil from the cooking spray can, attacked the surface of the counter to the left of the range as evidenced by staining in the photographs." *Id.* He describes the "only other heat producing appliances in evidence in the kitchen during two exams with photographs" as "a microwave and a dishwasher," both of which "are remote from

[6] National Fire Protection Association ("NFPA").

the range and the PAM can involved in the incident," and "[n]either of which . . . were reported to be in use at the time of the explosion." *Id.* The same, he says, is true of a "coffee maker," which was "on a cabinet across from the range and not known to be in use at the time of the explosion." *Id.*

Next, Cahanin describes his methodology; he states that "[t]he methodology of fire investigation before the Court in this case utilizes NFPA 921, *Guide for Fire and Explosion Investigations*." *Id.* at 9. He explains that "the scientific methodology breaks the analysis of this fire/explosion event into two distinct categories": (1) "the actions of the occupants present that did or did not impact the fire/explosion outcome"; and (2) "the environment in which the fire/explosion occurs including materials present in the room and materials available to burn," including in this case "the PAM can, wood counter, cooking oils or liquid combustibles, a gas line leak behind the range or from another building unit, or gas range malfunction/operation that results [sic] a gas leak and resulting ignition." *Id.*

In terms of occupant actions, Cahanin considers the report by Plaintiff of her actions, as the only occupant at the time of the accident and concludes that, accepting that account, "[t]he only action that can be considered as impacting the explosion was the decision to purchase and use PAM cooking spray for cooking." *Id.* at 9–10. He adds later that "[t]here is no indication that Ms. Bozick improperly performed the cooking operation beginning with the coating of the pan away from the range oven or cooktop and cooking the steak." *Id.* at 12. In terms of materials present, Cahanin first rules out a gas line leak, because "[a] natural gas explosion behind or in the range area most likely would have displaced the range from this location and may have been violent enough to do damage to cabinets," but "[n]o displacement of the cabinets, exhaust hood or the range were noted upon site examination." *Id.* at 10–11. He next rules out a

gas range malfunction both because he understands "Ms. Bozick did not operate any controls on the range prior to the explosion that injured her," and because "[t]he igniters are beneath the rangetop and had they been part of the explosion the rangetop would have been displaced and there is no evidence that such an even [sic] occurred." *Id.* at 11. Next, he considers the PAM canister as "the only significant object on the counter." *Id.* He notes that the incident, described as an explosion, "is most simply understood as a very rapid and violent fire event that can include a pressure front with the fire." *Id.* He explains that "[a] PAM 12-ounce can exposed to heat is designed to buckle on the bottom and vent the gas and oil within the container," that "[t]he buckling action going from concave to convex will result in the can falling over," and that "[t]he can was on the left side of the range on the counter before the explosion event." *Id.* He describes that "[t]he flammable gases composing about 17% of the volume of the can would readily disperse in air when released," and "upon finding a competent ignition source . . . will ignite rapidly and for a very brief period until the gas is burned up"; he adds that "[t]he open flame of the rangetop burner is a competent ignition source." *Id.* at 11–12. Last, he describes that "[t]he bubbling of the paint finish on the wood counter are [sic] an indication of high heat for a short period of time that did not result in ignition of the wood counter." *Id.* at 12.

Based on Plaintiff's testimony and these observations and analysis, he offers six opinions. First, he opines that "[t]here exists no evidence of the presence of a cooking oil or other combustible cooking liquid. A cooking oil fire would have spread along the surface of the wood counter and rangetop and resulting in staining of surfaces including cabinets and ceilings from incomplete combustion." *Id.* Second, he opines that "[t]he wood counter is not a viable combustible source that could produce an explosion." *Id.* Third, he opines that "[t]here is no evidence to indicate a natural gas leak from gas piping or due to a malfunction within the 30-inch

Hotpoint range." *Id.* Fourth, he opines that "[t]he bucking of the PAM can on the counter resulted in the can tilting over and gas from the can being dispersed in a way that the burner set on low on the top of the range provided a ready ignition for the gas vapor," and that "[t]he distance from the left edge of the front burner to the center of the 10-inch wood countertop is about 8-inches placing the burner ignition source in close proximity to escaping gas from a buckled PAM canister." *Id.* at 13. His sixth opinion, which follows from the preceding opinions, is that "[b]ased upon the application of the Scientific Method as detailed in NFPA 921, the only viable material present in the kitchen readily available for rapid ignition (explosion) is the highly flammable contents of the PAM can." *Id.*

Canahin's fifth opinion is in a slightly different vein. He opines:

> ConAgra in their can selection process gave over their entire focus to complying with national DOT safe transportation requirements and warehousing requirements in NFPA 20B. ConAgra in Safety Data Sheets for the PAM product classifies it as highly and extremely flammable in relation to DOT transportation of PAM. Consumers such as Ms. Bozick do not have ready access to the Safety Data Sheets and their more accurate warnings when compared to can labeling.

Id. Cahanin was deposed by Defendants' counsel on May 19, 2021. Dkt. No. 85-2.

4. William Kitzes

Fourth, Plaintiff offers the report and testimony of William Kitzes, who was retained as Plaintiff's expert in warnings, human factors, product safety, and product safety systems. Dkt. No. 102 at 1. Kitzes is a board-certified product safety manager and hazard control manager. Dkt. No. 90-4 ("Kitzes Report") at 5. He holds an Executive Certificate in Safety Management from the American Society of Safety Engineers, is a member of the Human Factors and Ergonomics Society, and holds a Certificate in Risk Management from the Harvard School of Public Health. *Id.* He has provided risk assessment and product safety management services to attorneys, corporations, and government organizations. *Id.* From 1974 to 1981, Kitzes worked

at the U.S. Consumer Product Safety Commission; he has also been retained as a consultant for a number of manufacturers on issues relating to product safety and consumer warnings. *Id.* at 6–7.

Kitzes's report begins by describing the product at issue in the case, PAM Original cooking spray, and the various warning labels on the product. Specifically, each can with flammable propellant was labeled, in a small box on the back of the can, "Can may burst if left on stove or near heat source." *Id.* at 9. Additionally, some of the privately labeled bottom-vented cans were labeled: "Never leave can on stove or near source of heat. If overheated, container is intended to vent pressure at a controlled rate through vents on bottom; however, exposure to sudden high temperatures may cause violent bursting." *Id.* at 9–10. Another private label contained a similar warning: "Never leave can on stove or near source of heat. Can may explode if heated." *Id.* at 10. He adds that Steven Baker, who was the "director of various packaging for Conagra," stated in his deposition in another case that he could not define the word "near" and could not say if it was three inches, six inches, a foot, or two feet. *Id.*

After reviewing pertinent facts and various depositions, Kitzes offers ten opinions. First, he opines that "ConAgra Foods, Inc. failed to act as a reasonably prudent manufacturer to adequately protect users from the catastrophic risk of fire and explosion associated with the use of the PAM Original cooking spray in vented cans under reasonably foreseeable conditions of use." *Id.* at 63. Second, he opines that Conagra failed to apply accepted principles of product safety management to establish and comply with a written corporate safety policy, identify product hazards and their severity, perform a risk assessment, monitor the continued safety performance of the product, and take corrective steps to warn consumers of any danger and to motivate them to avoid injury. *Id.* Third, he opines that Conagra failed to comply with DOT regulations, which require cans labeled 2Q to withstand 270 PSI of internal pressure before

bursting. *Id.* He, however, also notes that "[w]hile the DOT regulations at 49 CFR 173.306 govern the shipping and transportation of aerosol cans, they do not address the risk of injury to consumers." *Id.* at 47.

Kitzes's next set of opinions relate to Conagra's inadequate labeling of the PAM product. In his fourth opinion, he states that "ConAgra failed to comply with the requirements established by the Federal Hazardous Substances Act (FHSA) to adequately label the PAM Original aerosol cooking spray." *Id.* at 65. Specifically, he notes, "ConAgra failed to use the signal word Danger, the affirmative statement of principal hazard Extremely Flammable and the statement Container may explode if heated on the principal display panel." *Id.* In his fifth opinion, Kitzes states that Conagra failed to provide adequate precautionary measures because it did not inform users about the distance from cooking appliances and other heated surfaces that PAM was safe to store. *Id.* Kitzes focuses on the use of the term "near," which he implies is ambiguous. *Id.* Sixth, he notes that Conagra failed to comply with 16 C.F.R. § 1500.130, which requires a warning statement "adequate for the protection of the public health and safety," "because it presents a fire hazard in addition to the contents being under pressure." *Id.*

In Kitzes's seventh opinion, he notes that the Canadian PAM product is labeled differently and appears to comply with U.S. regulations. *Id.* Eighth, he opines that "ConAgra has failed to report to the Consumer Product Safety Commission (CPSC) that PAM aerosol cans 'could create a substantial product hazard'" and, ninth, that Conagra does not comply with the ANSI Standard for Product Safety Signs and Labels. *Id.*

Kitzes was deposed by Defendants' counsel on April 6, 2021. Dkt. No. 90-1.

B. Defendants' Experts

1. Nathan Dorris

Defendants offer the testimony of Nathan Dorris, Ph.D., who describes his area of experience and expertise, pertinent to this litigation, as warnings and communications pertaining to product safety. Dkt. No. 91-1 ("Dorris Report") at 1. Dorris holds a Ph.D. in industrial and systems engineering from Auburn University, with an area of specialization in human factors engineering; he is also certified by the Board of Certification in Professional Ergonomics. *Id.* Dorris's professional work experience includes routinely performing evaluations of the design and development of warnings and similar precautionary information and providing product safety services to a wide variety of entities, including corporations, non-profit organizations, trade associations, state and federal governmental agencies, and defense and plaintiffs' attorneys. *Id.* Dorris has served for many years on the ANSI Z535 committee that promulgates voluntary, consensus warning standards; he currently serves as the chairman of the ANSI Z535.5 standard subcommittee. *Id.* Dorris is also an affiliate professor at Auburn University, where he has taught a graduate course in human factors engineering. *Id.* at 2.

Dorris begins his report by describing human factors engineering, human error, and warnings research. He describes the field of human factors engineering as "a scientific discipline concerned with the understanding of interactions among humans and other elements of a system, including written communications." *Id.* at 2. He describes human error by explaining that "[h]uman error can fall into a variety of categories (*e.g.*, knowing violations, lapses of attention, failure to act as intended or 'action-not-as-planned,' or mistakes in judgment or perception)." *Id.* at 3. Finally, he describes warnings research first by explaining that "[a] warning, in general, is a message intended to reduce the risk of injury by encouraging safe behavior or discouraging unsafe behavior," and then explaining that "there has developed a sizable literature on responses

to safety messages." *Id.* He explains that "there are serious negative implications, from a human factors perspective, associated with attempts to include explicit and detailed precautionary messages via on-product warnings," because "there is no evidence to suggest that users would be willing or able to process all of this information." *Id.*

Dorris then offers three opinions. His first opinion relates to reasonable and appropriate safety information. He opines that "[a]s it relates to this matter, the safety information was reasonable, and appropriate in terms of presentation and content, from a human factors perspective." *Id.* at 5. He elaborates that "[t]he placement of the precautionary information on the spray can label is appropriate from a human factors perspective in that the messages are easily noticed during reasonable interaction, such as handling and reviewing the container." *Id.* He adds that "[f]rom a safety communications perspective, the safety messages are formatted appropriately" because, in addition to the location, "the appearance of the safety messages makes them noticeable on the spray can," and "[t]he label makes use of customary warning design features to make the information prominent and conspicuous as compared to the other text," including "layout, signal words, all capital letters, bold font, and concise safety messages." *Id.* Because of this, he concludes that "observers can readily identify that the messages are communicating safety-related information." *Id.* He further opines that "[i]n terms of content, the safety messages are direct, clear and appropriate from a safety communications perspective," because "[s]afety messages on the front of the label explicitly warn 'FLAMMABLE' and direct users to 'READ PRECAUTIONS ON BACK BEFORE USING,'" in accordance with "accepted practice, in the design of warnings, to direct readers to other labels, manuals, or supplemental sources of precautionary information." *Id.* His report includes photos of the warning labels he describes:

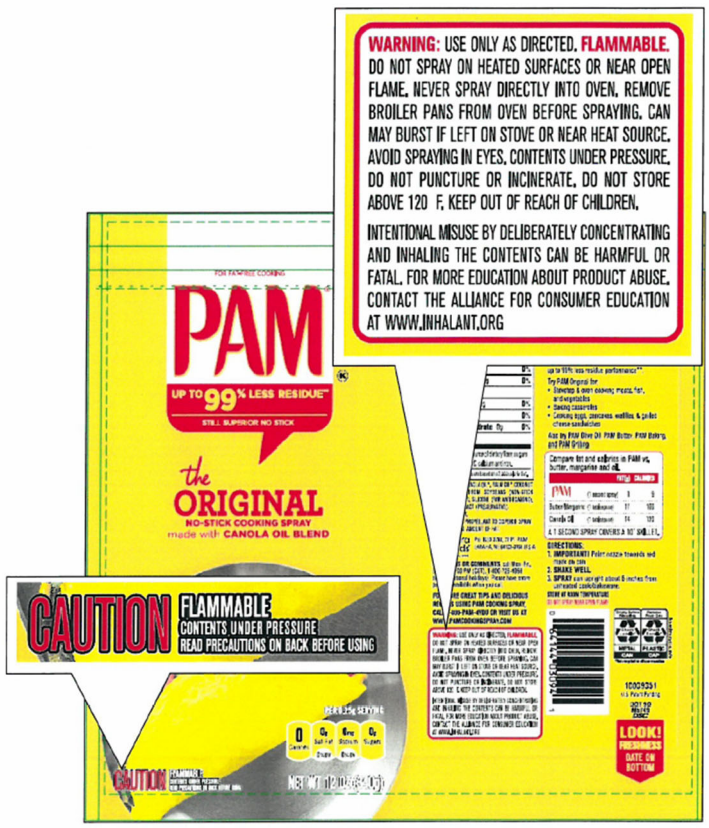


Figure 1. Labeling of Subject Cooking Spray, Excerpted from Bozick_DSC000001.

Id. at 6. He adds that the warning label includes the direction "DO NOT PUNCTURE OR INCINERATE," as well as safety messages alerting users to the flammable nature of the contents as well as warnings that "CAN MAY BURST IF LEFT ON STOVE OR NEAR HEAT SOURCE." *Id.* at 8. The label includes further warnings against spraying onto heated surfaces or near open flame, spraying directing into the oven, and storing above 120°F. *Id.* at 8–9. Dorris opines that "[t]his information appropriately provides clear, understandable steps for users to take to minimize their risk of injury." *Id.* at 9. He further opines that "[t]he consequences of a fire, bursting can, or other sudden release of flammable contents are intuitively obvious, given the nature of these hazards, and do not require any additional safety message," because "[i]t is reasonable to expect that anticipated consumers will appreciate the risk of serious injury associated with a fire or can that ruptures or vents suddenly near an ignition source." *Id.* He

opines that he is not aware of any standards, industry guidelines, or customary practice regarding explicitly warning consumers about pressure relief valves or venting or about the specific types of flammable components of a product. *Id.*

Dorris's second opinion relates to different or additional safety messages. *Id.* He opines that "[t]he evidence in this matter does not support a conclusion to a reasonable degree of certainty that any different or additional warnings provided by Conagra would have changed the behavior of Ms. Bozick as it relates to this incident." *Id.* He cites several excerpts from Plaintiff's deposition testimony, including that she did not read anything about PAM as she was making this purchase because she has used PAM for years; that she had definitely looked at the warnings and directions at some point prior to the incident because she has used PAM all her life; and that she understood that the word "flammable" means that the product can explode and knew not to put the product too close to the heat. *Id.* at 10–11.

Finally, Dorris's third opinion relates to the opinions offered by Plaintiff's expert witnesses regarding warning issues. *Id.* at 12. Specifically, he responds to the criticism by Hendrickson and Kitzes that the warning labels were inadequate because they did not use ANSI Z535.4 formatting conventions by stating that those standards "do not provide guidance to manufacturers about when to warn or what hazards to warn about," but "simply provide[] formatting conventions to follow after it was decided to provide a label," and only "address[] the content of a warning in very general terms." *Id.* He further opines that "[t]he voluntary standard does not attempt to provide some measure of effectiveness for warnings," and that ANSI Z535.4 standards do not always require a statement of the consequences of a hazard; in this particular case, he opines that "[t]he consequences of a fire, bursting can, or other sudden release of

flammable content are intuitively obvious, given the nature of these hazards, and do not require any explicit safety message." *Id.*

Next, Dorris responds to the portions of the Hendrickson Report and the Kitzes Report that rely upon a "design hierarchy," meaning their opinions "impl[y] that design modifications are always superior to warnings as safety interventions for all purported hazards and that if an alternative design can be identified it must be employed." *Id.* He rejects this as an "overly broad generalization and inconsistent with accepted safety engineering and human factors practice," because "[w]arnings and instructions are an appropriate safety intervention for dealing with many potential human errors, including those occurring in use and storage of various types of consumer products and equipment." *Id.* at 13. He notes that a "safety hierarchy" is "not broadly accepted as a principle of safety engineering that must be strictly followed in all circumstances and applications." *Id.*

Dorris also responds to Kitzes's statements that "Cans of PAM Original cooking spray with extremely flammable propellant are labeled, in a small box on the back of the can, stating: 'Can may burst if left on stove or near heat source.'" *Id.* Dorris opines that this is an incomplete citation of the warning label, which is summarized above. *Id.*

Next, Dorris responds to Kitzes's criticism of phrases like "near heat source" in the safety messages; he opines that qualitative terms like "near" and "far" are "commonly used in safety communications and provide meaningful and effective warnings," and that as it relates to this case, "it is reasonable to expect that users will appreciate that factors such as ambient temperature, being in direct sunlight and the heat source or cooking appliance will impact where the can could be safely stored." *Id.* at 14. He opines that because of "the variability in potential heat sources that may be involved, it is understandable that there is no single quantitative

distance that would be appropriate in all circumstances," and that he is not aware of data or research suggesting that users require "such explicit information (e.g., specific distances) in order to act safely." *Id.*

Finally, he opines that "to the extent Kitzes opines the warnings and instructions associated with the subject can of Pam were inadequate or defective, I disagree for the reasons outlined in this report." *Id.* He concludes:

> In summary, the existing safety messages are appropriate from a human factors perspective. The safety information is clear and explicitly warns about the flammable nature of the contents, that the contents of the can are under pressure, and the potential for the spray can to burst. The consequences of a fire, bursting can, or other sudden release of flammable contents are intuitively obvious, given the nature of these hazards, and do not require any additional safety message. It is reasonable to expect that anticipated consumers will appreciate the risk of serious injury associated with a fire or can that ruptures or vents suddenly near an ignition source.

Id. at 14–15. On March 30, 2021, Dorris was deposed in connection with this matter by counsel for Plaintiff. Dkt. No. 91-2.

2. Sarah Easley

Second, Defendants offer the report and testimony of Sarah Easley, Ph.D., P.E., who was retained to evaluate certain aspects of the analyses pertaining to the mechanical condition and performance of the Subject Can presented in Hendrickson's and Eagar's reports. Dkt. No. 91-4 ("Easley Report") at v. Easley opines that "Plaintiffs experts' conclusions attributing the venting in this matter to manufacturing defects are baseless and without merit." *Id.* at vi. Easley has a Ph.D. in mechanical engineering from the University of California, Berkeley, where her research focused on using microstructural imaging, experimental testing, and finite element analysis to understand the relationship between bone structure and bone strength and the effects of disease and treatment on that relationship. *Id.* at 1–2. She also holds a bachelor's degree in computer engineering and a master's degree in mechanical engineering, both from the University of

Denver. *Id.* at 2. Easley is a Managing Engineer at Exponent, Inc., where she has been employed for ten years. *Id.* at 1. As part of Easley's investigation, she witnessed two days of testing at an independent laboratory during which a series of metallurgical and mechanical tests and measurements were conducted on the Subject Can and an exemplar can following a protocol that Easley prepared and that was agreed to by Plaintiff. *Id.*

Easley's report begins with a description of the Subject Can, which was manufactured by DSC. She states that the vented bottom of the can contains four U-shaped score lines and is designed to buckle outwards when a certain internal pressure inside the can is achieved. *Id.* at 3. She continues, "[d]uring the buckling event, the U-shaped scores open, allowing product and propellant from inside the can to be released at a controlled rate." *Id.*

She explains that "[a] number of factors directly influence the pressure at which the bottom of the can will buckle and ultimately vent." *Id.* at 6. She provides an excerpt of the can specification produced by DSC, which includes some of the relevant dimensions and material properties of the Subject Can:

MATERIAL SPECIFICATIONS					
	Stock	Thickness	Temper	Coating	
				Inside	Outside
BODY	TFS	.0091"	T3CA	PET film	PET film
BOTTOM	TFS	.0138"	T5CA	PET film	PET film

PRESSURE RESISTANCE
Buckle (Venting Pressure)
180 psig MIN

(DOT 2Q)

Id. She explains that the table "shows that the bottom of the vented 2Q can is made from Tin Free Steel (TFS) having a nominal thickness of 0.0138 inch and an as-shipped temper of 'T5CA,'" and that the table shows that the bottom of the can is not designed to buckle or vent at a pressure below 180 PSI. *Id.* She references "a sample mill test report from the supplier of the steel used for the can bottoms by DSC" which "specifies thickness as 0.35 mm (0.0138 inches)

and thickness tolerance of ± 0.007 mm (± 0.0003 in), meaning the allowable lower bound thickness is 0.0135 in (0.0138 in 0.0003 in)." *Id.* at 6–7. She also notes that "the mill test report . . . references DIN EN 10202, which specifies a yield strength for TFS TH435 T5CA of 435 ± 50 MPa (63 ± 7 ksi)." *Id.* at 7. Based on this, she rejects Hendrickson's opinion that there is no specified thickness and material strength of the steel strength. *Id.* She states that, in contrast to Hendrickson's assertions, "the thickness and yield strength of the metal used in the manufacture of the can bottom are, in fact, produced to specified tolerances," and that Hendrickson "does not provide any evidence of a specific manufacturing defect to support his claim." *Id.* at 8.

Next, Easley summarizes the laboratory testing conducted on the Subject Can and exemplar cans. She first explains that testing the Subject Can is a reliable method to determine if it was manufactured within specifications, even though the can vented and buckled and is therefore now deformed. She states that although "[w]hen the bottom of the vented-type aerosol can everts, it deforms, . . . it does not do so arbitrarily or completely unpredictably," and that, as a result, "testing a buckled and vented can is a reliable method to determine the manufactured condition of that can." *Id.* at 9. She explains that even in the everted cans, "the thickness measurements across the flat center disk . . . were uniform . . . and all within tolerance," and that "[t]he flat center disc is expected to be least affected by any deformation associated with forming and everting, and therefore possess a thickness most representative of the as-manufactured thickness of the steel material from which the can bottoms are formed and for which the specification tolerances are defined." *Id.* She therefore concludes that because "measurements of the can bottom thickness are within the allowable tolerances following eversion," "it is not reasonable to argue that the as-manufactured thickness prior to eversion was below the allowable tolerance." *Id.* She also states that the "yield strength of the material was within tolerance for

both intact and everted cans and superficial hardness was also consistent with guidance values in the referenced standard." *Id.* at 10.

Easley then outlines the results of the inspection and testing of the Subject Can, which "demonstrated that the can bottom was manufactured according to specification." *Id.* at 10. She explains that "[t]he objective of the thickness survey was to assess the nominal thickness of the manufactured condition of the steel sheet comprising the can bottom," and that, therefore, "the primary region of interest was the flat center disc, because this region is least likely to be influenced by factors associated with manufacturing the can bottom and eversion that may slightly alter the original condition of the steel sheet from which the can bottoms are manufactured." *Id.* at 11. She states that, at Hendrickson's request, "measurements were also taken across the full diameter." *Id.*

As Easley explains, the testing showed that "nominal thickness of the subject can bottom is within tolerance for the steel comprising the can bottom." *Id.* at 15.

Property	Subject	Exemplar, Vented	Tolerance
Nominal thickness in center[a] (inch)	0.0139	0.0142	0.0138 ± 0.0003 inch[b]
Thickness, center region (inch)	**Avg.** 0.0139 **Min.** 0.0138 **Max.** 0.0140 *(14 measurements)*	**Avg.** 0.0143 **Min.** 0.0142 **Max.** 0.0145 *(13 measurements)*	

Id. at 16. As summarized in the table, the results of the testing showed that the average thickness of the center region of the bottom of the cans was 0.0139 inches and the minimum thickness was 0.0138 inches, both of which are within specifications for the steel sheets from which the bottoms are manufactured. *Id.* Easley also explains that:

> Thickness surveyed across the diameter of the subject can showed some variation, with an average thickness of 0.0138 inch, equal to the nominal thickness specified for the can bottom material. Two regions, symmetrically located on either side of the central disc, had thickness values below the tolerance minimum for the raw steel

material, with a minimum reading of 0.0127 inch. The same pattern in thickness readings was observed for the exemplar can, which also had local regions with thickness below the minimum tolerance for the raw steel material symmetrically located on either side of the central disc. This same characteristic has also consistently been observed in measurements made using the same methods for other exemplar cans (both everted and vented cans as well as intact cans) and is most likely due to the manufacturing process when forming the steel sheet into the domed can bottom.

Id. at 17. Easley provides a graph of those measurements in the Subject Can:

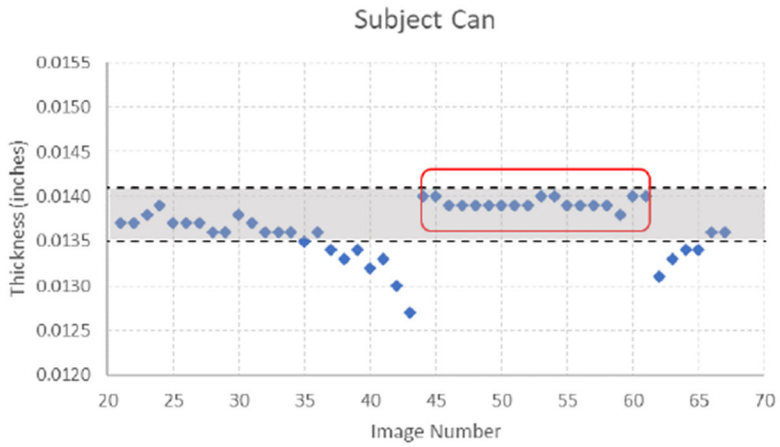


Figure 10. Plot of measured thickness vs. image number across Strip B for the subject can. The shaded region indicates the specified tolerance range. The red box indicates the region containing the flat disc in the center of the can bottom. Note the vertical axis does not start at 0.

Id. at 18. Easley also provides a graph of those measurements in the exemplar can:

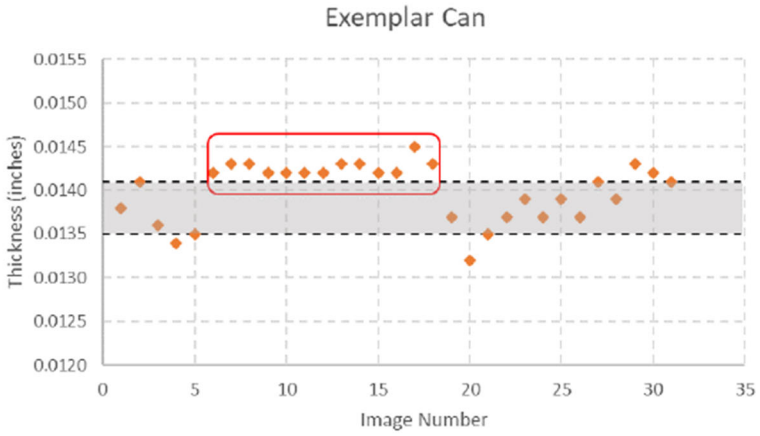


Figure 11. Plot of measured thickness vs. image number across Strip B for the exemplar can. The shaded region indicates the specified tolerance range. The red box indicates the region containing the flat disc in the center of the can bottom. Note the vertical axis does not start at 0.

Id. at 19. Based on these results, Easley opines that "the subject can was manufactured with bottom steel thickness and strength conforming to the design specifications that were established to control a minimum design buckling pressure of 180 psig." *Id.*

The next section of Easley's report provides rebuttal opinions to specific issues raised by Plaintiff's experts. Easley's first rebuttal opinion is that "Dr. Hendrickson does not demonstrate that the 'Computer Aided Analysis' that he relies upon has been properly verified and/or validated such that it can be used with reasonable certainty in a capacity predictive of true buckling pressures." *Id.* at 20. Easley notes that the results of the computer aided analysis—which she assumes refers to his finite element analysis—"are dependent on the inputs and assumptions that are used to create the model." *Id.* at 21. She continues that simply calculating a result using finite element analysis software is therefore not a guarantee that its result will be accurate. She states that despite this fact, Hendrickson does not present the assumptions on which his analysis relies, other than "with the exception of the central disc diameter, thickness and yield strength of the bottom of the can, and that it was a nonlinear static analysis." *Id.* She states that without these details, the results of his analysis cannot be evaluated. *Id.* at 22. She

also notes that Hendrickson does not demonstrate how he has verified that his results are not sensitive to the particular modeling conditions and assumptions. *Id.*

In her next sections, she opines that the analyses presented by Hendrickson and Eagar "are not based on subject-specific inputs and do not provide insight into the subject can performance during the incident or provide evidence of a manufacturing defect in the subject can." *Id.* at 23. Accordingly, she states that Hendrickson's analysis is insufficient to provide insight into the performance of the Subject Can during the incident and does not establish with any certainty that a manufacturing defect was present. *Id.* at 24. She similarly notes that "[p]utting aside whether [Eagar's] Weibull analysis is even appropriate or valid," it "cannot make predictions about the performance of a specific individual can." *Id.* at 25.

In her final opinion, Easley states that Eagar's "claim that the buckling strength of the can bottom varies with the thickness cubed is based on an incorrect interpretation of equations resulting from a math error." *Id.* Easley was deposed by Plaintiff's counsel on April 13, 2021. Dkt. No. 91-5.

3. Roch Shipley

Third, Defendants offer the expert report of Roch J. Shipley, Ph.D. who was retained to determine whether Plaintiff's accident occurred due to any defect or shortcoming in the product. Dkt. No. 91-6 ("Shipley Report") at 1. Shipley holds a Bachelor of Science and a Ph.D. in metallurgical engineering from the Illinois Institute of Technology. *Id.* at Ex. A. He has been a Principal Engineer at Professional Analysis and Consulting, Inc. *Id.* at 5. He has been a consultant in failure analysis for over thirty years and serves on the National Council of Examiners in Engineering and Surveying Committee, which develops the materials engineering examination. *Id.*

Dr. Shipley's report has been peer reviewed by Michael Koehler, Ph.D., another engineer

at Professional Analysis and Consulting, Inc. *Id.* Koehler has a Bachelor of Science degree in chemistry, mathematics, and computer science from Loyola University and a Ph.D. in medicinal chemistry from the University of Illinois Medical Center. *Id.*

Shipley's report begins by noting that neither Eagar nor Hendrickson consider the most likely explanation for Plaintiff's accident—that the Subject Can was overheated in violation of its warnings and instructions. *Id.* at 8. He states that Eagar's report is built on a "fundamental misunderstanding of the pressure-temperature relationship" of the PAM original cooking spray. *Id.* This is because, Shipley says, "under pressure the propellant [a mixture of propane and isobutane designated A-70] dissolves in the canola oil, reducing the effective pressure below that which would exist if the propellant did not dissolve." *Id.* at 8–9. Therefore, "Dr. Eagar's purported equilibrium analysis overstates the pressure in the can." *Id.* at 9.

Shipley next compares Hendrickson's test data from his laboratory, an external laboratory in other cases involving PAM cooking spray, and data from Sean Dee's report. *Id.* He says that for pure A-70, the pressure is 178 PSI at 130°F, which is only "2 psi less than the minimum buckle and vent pressure of the subject DSC vented cans." *Id.* Shipley opines that "after accounting for the vapor pressure depressant effect of the propellant dissolving into the oil, there should be no concern regarding the performance of the DSC vented cans," and Eagar's analysis is incorrect. *Id.* Shipley notes that the label on the PAM original can cautions the user to not exceed 120°F and, given that it was 74°F outside on the day of the accident, the temperature of the can was likely at 70°F unless it was too close to the stove or another heat source. *Id.* at 9, 10.

Additionally, Shipley opines that there is a "more than adequate margin or factor of safety" inherent in the cooking spray because the "can's contents must reach a temperature exceeding 160°F to reach a pressure of 180 psi, the minimum venting pressure for the can." *Id.*

at 11. If the kitchen temperature was 70°F, there would be a 90°F margin and a 110–115 PSI margin. *Id.* Shipley says considering that the Plaintiff testified that the venting occurred after she had turned the burner on her stove to low, the can would have been even cooler at that point and should not have vented under those circumstances. *Id.* He notes that Eagar agrees that the can was heated to at least 105°F, but Eagar's conclusion that nine containers out of the population will fail at 105°F is unsupported because, among other reasons, he overstates the corresponding internal pressure at that temperature. *Id.* at 11–12. Even so, says Shipley, it is virtually impossible that Plaintiff would have one of the nine cans and would heat it to 105°F, and it is more likely the can was overheated so as to reach the rated vent pressure of 180 PSI. *Id.* at 12.

Shipley next reviews the quality control records. *Id.* DSC's quality control includes testing a can off the production line every half hour to ensure that the bottom of the can buckles and vents at a pressure not less than 180 PSI. *Id.* Shipley says that DSC identified the lots of cans which contained Plaintiff's Subject Can and the test records which were not suggestive of any manufacturing defect. *Id.* at 12–13. He continues that the "distribution of vent pressures recorded during DSC's testing of cans from both lots was as follows: 13 tests—180 psi, 9 tests—185 psi, 9 tests—190 psi." *Id.* at 13. After manufacturing, the cans are shipped to Full-Fill, where the cans are filled with the propellant and the sealed tops are attached. *Id.* at 13. Shipley reviewed the records for the lot of cans which included the Subject Can and found that it passed Full-Fill's quality procedures. *Id.* Additionally, Full-Fill checked the pressure of the Subject Can and found it to be 65 PSI at 70°F. *Id.*

Shipley then turns to Eagar's statistical (Weibull) analysis; Shipley conducted his own Weibull analysis using the data from another person's—Ramaj's—accident, as Eagar had. *Id.* at

13. He used the Reliasoft Weibull ++ computer program and generated a curve (Figure 2, *id.* at 15) identical to Eagar's. *Id.* at 13. Shipley notes that the curve does not fit the data and it suggests that 36% of the cans should vent at pressures below 180 PSI, however, out of the 16 tests, none of the cans vented below 180 PSI. *Id.* at 14. The poor fit, Shipley says, is the result of forcing the data to a distribution. *Id.* Shipley then added the Plaintiff's fifteen points of data to the sixteen points of Ramaj's data set and generated a curve (Figure 3, *id.* at 15), which was similar to Figure 2 but there are more points at 180 PSI and higher so the curve is shifted downward and crosses the 180 PSI line at less than 20%. *Id.* at 14. Shipley then used "the correct pressure at various temperatures and the two parameter Weibull curve" to "correct" Eagar's estimates and concluded that PAM cooking spray cans "will not and did not vent unless significantly overheated." *Id.* at 15.

Shipley then discusses how a three parameter Weibull distribution fits the data more closely (see Figure 4, *id.* at 16), which Eagar did not consider. *Id.* A three-parameter distribution "shifts the start of the curve along the x axis," which is better for analyses involving pressure because it accounts for the elapsing of some measurement. *Id.* Such a distribution, says Shipley, demonstrates that "the probability of venting at pressures up to and including 177.5 psi is estimated to be zero." *Id.* From this "better distribution model and analysis," Shipley's states that his conclusion that PAM cooking spray cans will not vent under normal expected kitchen temperatures is "even more clear." *Id.*

Shipley next comments on Eagar's and Hendrickson's listed theoretical possibilities, specifically that variations in yield strength or thickness of the material on the bottom of the cans might lead to a lower-than-expected vent pressure. *Id.* at 17. He says that the steel raw material for the can bottoms is specifically manufactured and "tightly controlled" with nominal thickness

at 0.35mm with a tolerance of +0.007 mm, and the steel may deviate to the thin side by less than 1/10 the thickness of one sheet of paper. *Id.* Because "the raw material is consistent, and the tooling used to form the bottoms is consistent, there is no reason to believe that the strength or thickness of the bottom would vary and reduce the vent pressure below specification." *Id.* Additionally, laboratory testing found no deviation in the bottom of the Subject Can. *Id.* Shipley notes, however, that "the process of forming the bottom does slightly stretch and reduce the thickness of the material as constant volume is maintained." *Id.*

Next, Shipley notes that Eagar's suggestion that lack of vapor space could explain the venting of the cooking spray at a lower pressure is not relevant to Plaintiff's case because the Subject Can had been used prior to venting and vapor space increases as oil and propellant are dispensed. *Id.* at 18. Additionally, "Full-Fill weighs every can and ensures uniformity of filling." *Id.*

Shipley also says that Eagar's criticism of DSC's and Full-Fill's manufacturing process are "merely theoretical possibilities and are not relevant to the circumstances of Ms. Bozick's accident." *Id.* This is because there is no evidence to establish that there was some deficiency in the product that led to the accident. *Id.* at 18–19.

Shipley then discusses the regulatory requirements raised by Eagar and Hendrickson. *Id.* at 19. Beginning with the DOT regulations, Shipley says that the cited regulations "are not post transport consumer safety regulations" and they state that the maximum pressure for an aerosol can at 130°F is 180 PSI. *Id.* By contrast, the pressure of PAM cooking spray is 120–130 PSI. *Id.* Additionally, the Pipeline and Hazardous Materials Safety Administration issued a new regulation three days before Plaintiff's can was manufactured which allowed containers with vented bottoms. *Id.* at 20.

Turning to the U.S. Consumer Product Safety Commission ("CPSC"), Shipley discusses how the CPSC regulates labels. *Id.* He says that the "Conagra label complies with CPSC requirements" and even provides additional information, which the Plaintiff stated that she read and understood. *Id.* He states that the "[f]ederal government recognizes that the choice to use a vented can represents a balancing of risk of venting at a lower temperature/pressure to prevent a potential bursting at a high temperature/pressure" and therefore, "the bottom vented can is not a defective design." *Id.* at 21.

Finally, Shipley discusses the history of vented cans and accident statistics. *Id.* at 21. He says that the can is "safe when used as directed" and the number of accidents "is very small when compared with the number of vented cans sold." *Id.* Additionally, "there have been relatively few complaints or accidents" and he is "not aware of any finding of any defect in any can." *Id.* On April 20, 2021, Shipley was deposed by Plaintiff's counsel. Dkt. No. 91-7

4. Sean Dee

Finally, Defendants offer the report and testimony of Sean Dee, Ph.D., who was retained to conduct an investigation of technical issues surrounding the fire allegedly involving the PAM can at issue. Dkt. No. 91-10 ("Dee Report") at vi. Dee has a doctorate degree in chemical and biomolecular engineering from the University of California at Berkeley. *Id.* at vii. After he received his doctorate degree, he joined Exponent in the Thermal Sciences practices, where he applies the fundamentals of chemical engineering to "help clients understand and solve problems." *Id.* He is an alternate member of the technical committee on Aerosol Products for the NFPA, which oversees NFPA 30B—Code for the Manufacture and Storage of Aerosol Products. *Id.*

Dee starts by detailing his investigation. *Id.* at 1. He states that he "tested the thermal response of PAM Original No-Stick Cooking Spray (PAM Original) cans to uniform and non-

uniform heating and measured the resulting pressure of the can content." *Id.* He also conducted a joint inspection of Bozick's home as well as examined Bozick, both which were documented with notes and photographs. He also notes that his methodology is consistent with the NFPA 921 Guide for Fire and Explosion Investigations (2021). *Id.*

Dee then provides a description of an aerosol product. *Id.* at 5. He notes that liquefied gases are one type of material that is used as a propellant in such a can. *Id.* He continues: "It is my understanding that the subject can in this case was filled with a formulation that used approximately 17% food grade liquefied hydrocarbon propellant A-70." *Id.* at 6.

Dee offers thirteen numbered opinions. *Id.* at viii. First, he opines that the fire scene "was not properly documented prior to alteration." *Id.* at 7. He notes that while Bozick was being treated, the scene was immediately cleaned and he is "not aware of any photographs that were taken to document the scene, fire patterns, or fire effects that would have been present immediately following the incident before the scene was cleaned." *Id.* at 8. Accordingly, he concludes that "data for the investigation are limited." *Id.*

Second, he opines that PAM cans will not "reach the designed venting pressure if the directions and warnings on the label are followed." *Id.* at 10. He notes that Exponent conducted tests on exemplar cans and found that "exemplar cans must be heated in excess of 180°F to generate sufficient internal pressure to cause the cans to buckle and vent." *Id.* at 12. He therefore concludes that "the can must be left on a stove, near a heat source, stored above 120°F, or not stored at room temperature" in order to buckle. *Id.* A table documenting these testing results is included in his report and is below:

Table 2. Uniform Heating Testing Results for Pressure-Temperature Relationship in PAM Aerosol Cans

Temperature (°F)	Measured Pressure (psig)				Reported Pressure (psig)[40]
	Can #1	Can #2	Can #3	Average	Pure A-70
Ambient (~75)	80	85	80	81.7	77.4
80	85	85	85	85.0	84.4
90	90	90	90	90.0	99.6
100	100	100	100	100.0	116.4
110	110	110	110	110.0	135.0
120	125	120	120	121.7	155.4
130	130	135	125	130.0	177.8
140	140	140	145	141.7	---
150	160	165	160	161.7	---
160	175	175	175	175.0	---

Third, Dee opines that a can left near an operating burner is unlikely to reach the designed venting pressure. He noted that Exponent conducted testing "to characterize the pressure in a can if it were placed on a countertop in close proximity to an operating cooktop burner." *Id.* at 13. In one test, Exponent placed an exemplar can directly adjacent to the test cooktop's largest burner operating on high. *Id.* Dee states:

> In the conducted test, the surface temperatures of the can were allowed 90 minutes to stabilize, and then the can pressure was measured as 135 psig. This can pressure corresponds to a temperature of approximately 134°F for the internal contents based on the temperature-pressure relationship described in Table 2. The surface temperatures at the time the pressure was measured ranged from approximately 90°F-120°F on the rear side of the exemplar can, and from 140°F-155°F on the front side of the exemplar can, with an average surface temperature of 133°F.

Id. at 14–15. In another test, more closely approximating the conditions of the subject incident, a can was placed approximately six inches away from the edge of the counter next to a burner operating at its highest setting and, after one hour in that location, the pressure of the internal contents of the tested can was 100 PSI. *Id.* at 15. Dee notes that the Subject Can, however, was only on the counter for 15 minutes and the subject burner was only set on high for approximately

six to eight minutes. Dee therefore concludes that: "[b]ased on these considerations, the anticipated temperatures of the subject can would be even lower than those recorded in the testing if the subject can was located a similar distance away from the subject burner." *Id.* at 15. Accordingly, Dee also opines that "Ms. Bozick's testimony does not establish a set of conditions that would result in the subject can reaching the designed venting pressure." *Id.* at 16.

Dee then offers various opinions about the circumstances surrounding the cause of the fire. Fifth, Dee opines that "[a]n ignition sequence for the fire cannot be determined to an acceptable degree of scientific certainty." *Id.* at 18. And, sixth, Dee opines that the "cause of the fire is undetermined." *Id.* at 20.

Dee also offers various rebuttal opinions to specific issues raised in Plaintiff's expert reports. *Id.* at 21. Dee opines that the "[u]se of hydrocarbon propellants in consumer aerosol spray products, including cooking oil sprays, is reasonable and not evidence of a design defect." *Id.* at 21. Dee notes that "[h]ydrocarbon propellants are used in a variety of consumer products, including but not limited to, cooking oil spray, personal care products (e.g., deodorant, hairspray, perfumes), insecticides, paints, and air fresheners." *Id.* at 21. Dee continues that "[o]ne benefit of hydrocarbon blend propellants is they establish pressure within the container based on vapor pressure, thereby maintaining a relatively constant pressure and consistent spray pattern throughout the life of the product" and that such pressure is important for performance as it can impact spray rate, particle size distribution, and spray quality. *Id.* at 21. Dee then addresses the alternative designs proposed by Plaintiff's experts. *Id.* at 22. Dee addresses how each change would require a consideration of its impact on other facts and notes that "plaintiff's experts have failed to establish the potential viability of these proposed alternative designs for the subject product." Dee concludes that the "holistic evaluation of product design is critical." *Id.* at 23.

Dee then contests Plaintiff's expert opinions criticizing "the 'factor of safety' for the subject product." *Id.* at 23. Dee notes that the can explicitly instructs users not to store above 120 degrees Fahrenheit and yet testing "showed that the cans will not vent unless heated to temperatures in excess of 180° F." *Id.* at 24. Dee states: "Therefore, the cans have a margin of safety of at least 60°F between the conditions specified by the directions and warnings (120°F, which corresponds to 120–125 psig) and the designed venting condition (180 psig)." *Id.*

Next, Dee concludes that Eagar's criticism of the water bath testing is unfounded. *Id.* Dee states that Eagar "claims in his report that the test is not relevant because the water in the bath exerts a hydrostatic pressure on the bottom dome" (of approximately .44 PSI per foot of depth), which in turn influences the pressure at which the bottom dome will buckle. *Id.* Dee states that the cans in the water bath are submerged approximately eight inches so the hydrostatic pressure factor is .3 psig. *Id.* Dee therefore concludes that the "impact of the water's hydrostatic pressure in the test set" is insignificant and can be neglected. *Id.* at 25.

Dee also notes that Eagar has biased his Weibull analysis by using data that was not representative of the subject product. *Id.* Dee notes that Eagar's Weibull analysis assumes that the pressure-temperature relationship of the subject formation is the same as for pure A-70 propellant. *Id.* at 26. However, Dee states "[a]t a given temperature, an aerosol can filled with pure A-70 propellant will have a much higher pressure compared to an aerosol can filled with the subject cooking spray formulation." *Id.* Therefore, Eagar's conclusion that 9 out of 132 million cans would vent at 105° F, which corresponds to 126 PSI based on the Weibull analysis does not apply, as a PAM Original can at this pressure (126 PSI) would be at a temperature of 120 to 130 degrees Fahrenheit. *Id.* Dee also opines that Eagar's Weibull analysis is not statistically significant because the data does not follow a Weibull distribution. *Id.* at 26–30.

Dee's second to last opinion concerns Hendrickson's "untested hypothesis as to the cause of the fire." *Id.* at 30. Dee takes issue with Hendrickson's hypotheses, noting that the subject product is not defective in design for the reasons Dee stated earlier and Hendrickson's allegation that the "can may vent as low as 125 psi is untested." *Id.* at 30.

Finally, Dee opines that shaking the aerosol spray does not set up the potential for a BLCBE. *Id.* at 31. Dee notes that a BLCBE is caused by a rapid depressurization, usually due to a partial vessel failure (*i.e.*, a crack), and that, in Eagar's report, this rapid depressurization is use of the product by pressing the valve at the top of the can. *Id.* at 32. Dee states that this mechanism, however, does not cause rapid depressurization. *Id.* Moreover, even if a BLCBE were to have occurred, the can would have vented while the user sprayed the product, which is inconsistent with Bozick's testimony. *Id.* Dee also notes that Eagar's report mischaracterizes the BLCBE literature and that BLCBEs are high energy failures and their characteristics bear little resemblance to the Subject Can. *Id.*

Dee was deposed by Plaintiff's counsel on March 11, 2020. Dkt. No. 91-11. On May 12, 2020, Dee submitted a supplemental discussion of his expert report in light of the opinions and analysis provided by Plaintiff's expert, Cahanin. Dkt. No. 91-12. First, Dee opines that Cahanin has not provided an opinion on the cause of the fire. With respect to Cahanin's fourth opinion (which hypothesized that the PAM can may have buckled and titled over in a way that the burner set on low provided ready ignition), Dee notes that it fails to address the question of why the Subject Can buckled and released its contents in the first place. *Id.* at 2. Dee also notes that Cahanin failed to address and evaluate whether the can vented due to overheating. *Id.* Dee contrasts Cahanin's opinion with his own in which he conducted testing and found that "it the can had been placed on the countertop next to the stove, it would not have been sufficiently

heated to pressure to actuate the venting mechanism" and evaluated alternative hypothesis for venting, finding that they were not supported by evidence in the case. *Id.* at 3. Second, Dee opines that Cahanin's opinion "regarding requirements for can selection and warnings is provided without bases." *Id.*

PROCEDURAL HISTORY

The complaint in this case was filed on May 6, 2019; it asserts a negligence claim, a strict products liability claim, a breach of warranty claim, a breach of implied warranty claim, and a claim under New York General Business Law ("NY GBL") § 349 for deceptive acts and practice. Dkt. No. 1. On July 11, 2019, Plaintiff voluntarily dismissed her claim for breach of express warranty. Dkt. No. 21. On July 24, 2019, Defendants filed their answer. Dkt. No. 22.

Defendants filed their motion for summary judgment and four motions to preclude expert testimony on June 25, 2021. Dkt. Nos. 77, 80, 83, 86, 92. Plaintiff filed a motion to preclude testimony of four experts on the same day. Dkt. No. 87. The parties filed opposition briefs on July 23, 2021, Dkt. Nos. 95, 96, 98, 100, 102, 105; the parties filed reply briefs on August 6, 2021, Dkt. Nos. 110, 112, 113, 114, 115, 117.

LEGAL STANDARD

I. Summary Judgment Motions

Under Federal Rule of Civil Procedure 56, a court "shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). "When the burden of proof at trial would fall on the nonmoving party, it ordinarily is sufficient for the movant to point to a lack of evidence to go to the trier of fact on an essential element of the non-movant's claim." *Jaramillo v. Weyerhaeuser Co.*, 536 F.3d 140, 145 (2d Cir. 2008). If the movant meets its burden, "the nonmoving party must come forward with admissible evidence sufficient to raise a

genuine issue of fact for trial in order to avoid summary judgment." *Id.* "An issue of fact is 'material' for these purposes if it 'might affect the outcome of the suit under the governing law,'" while "[a]n issue of fact is 'genuine' if 'the evidence is such that a reasonable jury could return a verdict for the nonmoving party.'" *Konikoff v. Prudential Ins. Co. of Am.*, 234 F.3d 92, 97 (2d Cir. 2000) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). In determining whether there are any genuine issues of material fact, the Court must view all facts "in the light most favorable to the non-moving party," *Holtz v. Rockefeller & Co., Inc.*, 258 F.3d 62, 69 (2d Cir. 2001), and the movant bears the burden of demonstrating that "no genuine issue of material fact exists," *Marvel Characters, Inc. v. Simon*, 310 F.3d 280, 286 (2d Cir. 2002) (citations omitted).

"[A] party may not rely on mere speculation or conjecture as to the true nature of the facts to overcome a motion for summary judgment." *Hicks v. Baines*, 593 F.3d 159, 166 (2d Cir. 2010) (quoting *Fletcher v. Atex, Inc.*, 68 F.3d 1451, 1456 (2d Cir. 1995)). Nor may the non-moving party "rely on conclusory allegations or unsubstantiated speculation." *F.D.I.C. v. Great Am. Ins. Co.*, 607 F.3d 288, 292 (2d Cir. 2010) (quoting *Scotto v. Almenas*, 143 F.3d 105, 114 (2d Cir. 1998)). Rather, to survive a summary judgment motion, the opposing party must establish a genuine issue of fact by "citing to particular parts of materials in the record." Fed. R. Civ. P. 56(c)(1)(A); *see also Wright v. Goord*, 554 F.3d 255, 266 (2d Cir. 2009). To defeat a motion for summary judgment, the non-moving party must demonstrate more than "some metaphysical doubt as to the material facts." *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986). The non-moving party "cannot defeat the motion by relying on the allegations in [its] pleading, or on conclusory statements, or on mere assertions that affidavits

supporting the motion are not credible." *Gottlieb v. Cnty. of Orange*, 84 F.3d 511, 518 (2d Cir. 1996) (internal citation omitted).

The Southern District's Local Civil Rule 56.1 sets forth specific requirements about how the facts relied upon by the moving party and disputed by the opposing party are to be presented. Any party moving for summary judgment must "annex[] to the notice of motion a separate, short and concise statement, in numbered paragraphs, of the material facts as to which the moving party contends there is no genuine issue to be tried." L.R. 56.1(a). Local Rule 56.1(b), in turn, requires the party opposing the motion to "include a correspondingly numbered paragraph responding to each numbered paragraph in the statement of the moving party, and if necessary, additional paragraphs containing a separate, short and concise statement of additional material facts as to which it is contended that there exists a genuine issue to be tried." L.R. 56.1(b). All statements in a Local Rule 56.1 submission "must be followed by citation to evidence which would be admissible." L.R. 56.1(d). "Each numbered paragraph in the statement of material facts set forth in the statement required to be served by the moving party will be deemed to be admitted for purposes of the motion unless specifically controverted by a correspondingly numbered paragraph in the statement required to be served by the opposing party." L.R. 56.1(c).

II. *Daubert* Motions

Under Federal Rule of Evidence 702, a witness who is qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion if: "(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702. "[T]he proponent of expert testimony has the burden of establishing by a preponderance of

the evidence that the admissibility requirements of Rule 702 are satisfied." *United States v. Jones*, 965 F.3d 149, 161 (2d Cir. 2020) (quoting *United States v. Williams*, 506 F.3d 151, 160 (2d Cir. 2007)). That rule requires the proponent to establish and the trial judge to find "that any and all scientific testimony or evidence admitted is not only relevant, but reliable." *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993). This "gatekeeping obligation" applies "to all expert testimony." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999).

"The objective of [the gatekeeping] requirement is to ensure the reliability and relevancy of expert testimony. It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Id.* at 152. Relevancy is determined by whether the proffered evidence "has any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable." *Amorgianos v. Amtrak*, 303 F.3d 256, 265 (2d Cir. 2002). Reliability is determined by considering if (1) "the testimony is based on sufficient facts or data;" (2) "the testimony is the product of reliable principles and methods;" and (3) "the expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702; *see also Amorgianos*, 303 F.3d at 266 (citing this standard).

Courts are to adhere to a "liberal standard of admissibility for expert opinions," *Nimely v. City of New York*, 414 F.3d 381, 395–96 (2d Cir. 2005), beginning with "a presumption that expert evidence is admissible," *Chen-Oster v. Goldman, Sachs & Co.*, 114 F. Supp. 3d 110, 115 (S.D.N.Y. 2015) (citing *Borawick v. Shay*, 68 F.3d 597, 610 (2d Cir. 1995)). However, a court still must determine that the evidence is "sufficiently reliable so as to be admissible." *Amorgianos*, 303 F.3d at 268. "In deciding whether a step in an expert's analysis is unreliable,

the district court should undertake a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and methods to the case at hand." *Id.* at 267. "[I]t is critical that an expert's analysis be reliable at every step." *Id.* Even "[i]f the witness is relying solely or primarily on experience, [he still] must explain how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts." *Alto v. Sun Pharmaceutical Industries, Inc.*, 2021 WL 4803582 (S.D.N.Y. Oct. 13, 2021) (internal quotation marks omitted) (quoting *Pension Comm. of Univ. of Montreal Pension Plan v. Banc of Am. Sec., LLC*, 691 F. Supp. 2d 448, 473 n.148 (S.D.N.Y. 2010) (quoting Fed. R. Evid. 702 advisory committee's note)). "In short, the district court must 'make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.'" *Amorgianos*, 303 F.3d at 265–66 (quoting *Kumho Tire*, 526 U.S. at 152).

"[M]any factors 'will bear on the inquiry' of whether Rule 702 is satisfied, . . . and . . . 'the inquiry envisioned by Rule 702 is a flexible one.'" *Jones*, 965 F.3d at 161 (quoting *Daubert*, 509 U.S. at 593–94) (alteration omitted). However, "nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by *ipse dixit* of the expert." *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

DISCUSSION

I. Conagra's Motion for Summary Judgment on Bozick's Products Liability Claims

"In accordance with a long-standing and evolving common-law tradition, a manufacturer of a defective product is liable for injuries caused by the defect." *In re New York City Asbestos Litig.*, 59 N.E.3d 458, 468 (N.Y. 2016). A product is considered defective if it "(1) contains a

manufacturing flaw; (2) is defectively designed; or (3) is not accompanied by adequate warnings for the use of the product." *Id.* at 469 (cleaned up).

"In design defect cases, the alleged product flaw arises from an intentional decision by the manufacturer to configure the product in a particular way. In contrast, in strict products liability cases involving manufacturing defects, the harm arises from the product's failure to perform in the intended manner due to some flaw in the fabrication process." *Denny v. Ford Motor Co.*, 662 N.E.2d 730, 735 n.3 (1995). Claims under the last category—failure to warn—can be "framed in terms of strict liability or negligence," but the two causes of action are "functionally equivalent." *In re New York City Asbestos Litig.*, 59 N.E.3d at 469.

A. Design Defect Claims

Defendants move for summary judgment on Plaintiff's design defect claims on two bases: First, Defendants claim that Plaintiff's theory that her PAM container buckled at a pressure below the pressure specification does not establish a design defect claim as it did not result from an intentional decision of the manufacturer. Dkt. No. 93 at 17–23. Second, Defendants contend that Plaintiff's alternative theory that the Subject Can exploded due to a BLCBE is speculative, not supported, and lacks a feasible alternative design. *Id.* at 23–25. In response, Plaintiff alleges that the can of PAM was not designed to ensure a minimum buckle pressure of 180 PSI due to intentional, design-related choices of Conagra and that Conagra's argument that the occurrence of a BLCBE is speculative amounts to "little more than disagreements with Dr. Eagar's ultimate conclusions."[7] Dkt. No. 105 at 20–26.

[7] Plaintiff's briefing also references the use of A-70 propellant, which is highly flammable, in the course of their design defect arguments. Dkt. No. 105 at 23. However, this is referenced only in the discussion of the existence of a feasible alternative design for the product—the second element of a design defect claim—and is entirely absent from Plaintiff's discussion of design elements that posed a substantial likelihood of harm, the first element of the claim. *See id.* at 20–22. Defendants' briefing highlights the problem with viewing the flammability of the propellant

In order to establish the existence of a design defect, a plaintiff must demonstrate: (1) that the product, as designed, poses a substantial likelihood of harm; (2) that it is feasible to design the product in a safer manner; and (3) that the defective design was a substantial factor in causing the plaintiff's injury. *Voss v. Black & Decker Mfg. Co.*, 450 N.E.2d 204, 208–09 (N.Y. 1983); *see also Urena v. ConAgra Foods, Inc.*, 2020 WL 3051558, at *12 (E.D.N.Y. June 8, 2020). "[C]omplex cases in which 'lay jurors simply are not equipped with the relevant background knowledge' 'require an expert opinion as to defect and as to feasible alternative design." *Urena*, 2020 WL 3051558, at *12 (alterations adopted) (quoting *Water Pollution Control Auth. of the City of Norwalk v. Flowserve US, Inc.*, 782 F. App'x 9, 15 (2d Cir. 2019)).

1. Design Defect Claim Based on Can Buckling at Pressure Less Than 180 PSI

Plaintiff's first design defect theory is two-fold. The overarching design defect theory is that "the can was not designed to ensure a minimum buckle pressure of 180 PSI, and that the failure to reliably withstand such pressures is the result of the intentional, design-related choices of ConAgra." Dkt. No. 105 at 21. Specifically, Plaintiff identifies two interrelated problems, based on Hendrickson's opinions, that she characterizes as design defects: (1) "the decision to rely on specifications for the pre-manufactured thickness and strength of the steel [on the bottom

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as a design defect: "With respect to Plaintiff's arguments regarding the flammability of the propellant, Plaintiff provides no explanation for how such a design creates a 'substantial likelihood of harm'; when the product, as designed, would have retained all of its contents under the circumstances alleged by Plaintiff." Dkt. No. 93 at 20. Although this argument assumes that there were no other design defects with the can that might have caused it to buckle at a pressure below 180 PSI and in the circumstances described by Plaintiff, an assumption the Court interrogates *infra*—the fundamental point is well-taken. The flammability of the can's contents is not, in and of itself, a design defect that could have posed a likelihood of harm in an otherwise properly designed can, which would not buckle and release its contents in normal and foreseeable use conditions. Plaintiff fails to respond to this argument in its papers and does not mention the propellant's flammability in context of identifying the design defects and instead references it only in context of safer alternative designs. As such, the Court does not consider it as one of the potential design defects identified by Plaintiff.

of the can] rather than maintaining specifications for the finished product"; and (2) "the decision to introduce U-Shaped scores on the bottom of the can which significantly reduced the buckle pressure of the can and made the consequences of the can reaching its buckle pressure exponentially more hazardous." *Id.* at 22.

It is undisputed that Conagra's design of the PAM Original cooking spray cans is intended to ensure that the cans do not buckle and vent at a temperature below 180 PSI. Conagra's can manufacturer, DSC, has in place quality assurance procedures that include testing of a can off the production line every half hour; the can is pressurized and must buckle and vent at a pressure not less than 180 PSI, and the test results are recorded. Conagra's 56.1 ¶ 24; Bozick's 56.1 Response ¶ 24. The manufacturing records for the lot of cans in which Plaintiff's can was produced reflect that the pressures at which the can buckled and vented measured for all cans tested from that lot were 180 PSI or higher. Conagra's 56.1 ¶ 25; Bozick's 56.1 Response ¶ 25.[8] It is undisputed that, according to Plaintiff's experts, a can of PAM used under the conditions testified to by Plaintiff would not reach a pressure of 180 PSI. *See* Conagra's 56.1 ¶ 69; Bozick's 56.1 Response ¶ 69 ("Plaintiff's experts agreed that PAM Cooking Spray would not reach an internal pressure of 180 PSI under reasonable or foreseeable use conditions."); *see also* Dkt. No. 94-4 at 52:16–22 (Hendrickson responding at deposition to a question about whether he has "identified in any of [his] work any foreseeable condition in a kitchen setting that would allow the can to heat up enough to reach an internal pressure of 180 psig," that he doesn't "think there's any reasonable way that that could happen unless the can was sitting directly on

[8] Plaintiff's response notes that "the technician recording the test results [rounds] to the nearest interval of 5," so a recorded pressure of 180 PSI could be as low as slightly below 178. *Id.* This difference is not significant to the facts of the case; the parties all agree that the conditions in Plaintiff's kitchen, as described, were not enough to bring the can to pressure anywhere near 180 PSI or 178 PSI.

top of the gas flame"); Dkt. No. 94-3 at 189:18–190:24 (Eagar responding at deposition, to a question about whether he has "analyzed how likely it would be for a cooking spray container to heat over 180 PSI during reasonable or foreseeable use," that it is "[s]tatistically improbable"). As such, no design defect claim can lie based on the choice to design the cans of spray to withstand pressures only up to 180 PSI; it is undisputed that this choice cannot have caused Plaintiff's injuries here.

Previous cases have rejected design defect claims related to the bursting pressure of Conagra's PAM Original cooking spray cans on this basis. In *Urena v. ConAgra Foods, Inc.*, Judge Chen considered such a design defect theory premised on Hendrickson's expert testimony in that case and rejected the theory, reasoning that "[e]ven if Dr. Hendrickson's testimony is admissible, his conclusions do not support Plaintiffs' design defect theory," because Hendrickson testified that it was "highly unlikely" that the can would reach the "maximum allowable pressure of 180 psig, when placed in close proximity to a gas burner during a normal cooking process, even if the time to which the can is exposed to heat is hours." 2020 WL 3051558, at *12. In other words, because the can was designed to withstand pressures of up to 180 PSI, and because according to Hendrickson's testimony, the can would not have reached that maximum pressure under the conditions testified to by the plaintiffs there, the design of the can cannot have been what caused the plaintiffs' injuries. In *Schmidt v. Conagra Foods, Inc.*, Judge Underhill considered and rejected the same theory, again supported by Hendrickson's expert testimony, for the same reason: "Dr. Hendrickson's testing tends to show that a designed tolerance of 180 psig is not defective under ordinary use, including the conditions alleged by [the plaintiffs]." 2020 WL 7027445, at *11 (D. Conn. Nov. 30, 2020).

Confronted with that challenge, Plaintiff attempts to reframe her claim. She does not

argue that the can's design to vent at 180 PSI and the use of a venting mechanism when the can reaches that internal pressure is a design defect, but rather that "the can was *not* designed to ensure a minimum buckle pressure of 180 PSI, and that the failure to reliably withstand such pressures is the result of intentional, design-related choices of ConAgra"—namely, the decision to utilize metal of a specified strength and thickness before manufacturing for the bottom of the cans but not to maintain specifications or tolerances for the post-manufacturing thickness of the bottom of the cans.[9] Dkt. No. 105 at 21–22.

In support of its position that PAM's lack of specifications or tolerances for post-manufacturing thickness of the bottom of the cans is a design defect, Plaintiff relies on the testimony of Hendrickson. Dkt. No. 105 at 21–22. Specifically, Hendrickson's eleventh opinion identifies the failure to create specifications for the thickness of the bottom of the cans as a defect, which he again characterizes as a design defect: "[F]ailure to specify a tolerance for the

[9] Plaintiff's argument raises the question whether the failure to maintain specifications for the finished can bottoms is better understood as a design defect or as a manufacturing defect. That this defect may be viewed as either is evident in Plaintiff's briefing, which presents the lack of specifications for the can bottom as a basis both for Plaintiff's design defect and manufacturing defect claims. *See* Dkt. No. 105 at 21, 28. However, while Plaintiff presents the lack of specifications as the basis both for its design and manufacturing defect claims, its argument with respect to each claim differs slightly. First, Plaintiff argues that the lack of specifications constitutes a design defect in that it is an intentional choice of the manufacturer that results in unreliable manufacturing across *all* cans. *Id.* at 21; *see Catalano v. MarineMax*, 2022 WL 715465, at *12 (E.D.N.Y. Mar. 10, 2022) ("[W]here a plaintiff . . . relies on allegations and/or evidence that the claimed defects are common to an entire class of vehicles based on their design, rather than the result of an error in the manufacturing process, the plaintiff's claim is more appropriately characterized as a design defect claim."). Second, Plaintiff argues that the lack of specifications resulted in a manufacturing defect in the Subject Can, because the lack of specifications caused this can *in particular* to be "weakened to a significantly greater degree than others," to the point that it failed at a temperature that it was designed to withstand. Dkt. 105 at 28. In other words, Plaintiff appears to argue that the lack of specification for final thickness is a design defect in that it results in improper disparities across "*all* cans manufactured," *id.*, and a manufacturing defect in that it resulted in this *particular* can unintentionally being weakened to significantly greater degree than other cans. Because these arguments present two separate theories of potential liability, the Court addresses each separately.

nominal thickness of ,0138 [sic] inches for the bottom of the can, and failure to specify a tolerance for the strength of the material used for making the can bottom constituted a design defect." *Id.* Hendrickson further opines that this failure to specify a tolerance for the nominal thickness—in connection with the decision to include vents in the bottom of the can—led to the possibility of the canister bursting at below 180 PSI: "[H]ad the same defect present in the subject vented DOT 2Q PAM Original can, existed in a non-vented DOT 2Q can, it would not have reduced the 270 psig, or greater, burst pressure to a pressure below 180 psig." *Id.* In other words, as a result of the failure to provide specifications for the post-manufacturing thickness of the bottoms of the cans and the decision to include scores in the bottom, Plaintiff claims that Defendants' cans as a general matter are not able reliably to withstand pressure of up to 180 PSI.

As an initial point, a failure to maintain specifications as to a particular design feature is not in and of itself a design defect. While a lack of specifications as to the permissible thickness of the bottom of a PAM Original can may result in versions of that can being made that are defective, it just as well may not. For example, there may be no need to maintain a specification as to the post-manufacturing thickness of the bottom of the cans as the rest of the design and manufacturing processes might necessarily result in the bottoms of those cans being formed in such a way that they will still reliably withstand pressures of up to 180 PSI. Thus, in order to prove that Defendants' failure to maintain such a specification was a design defect, Plaintiff must prove that it actually resulted in the products being defective—here, failing to withstand pressures of up to 180 PSI.

Plaintiff, however, fails to provide sufficient evidence from which a reasonable jury could find that Defendants' cans, as a result of the failure to provide specifications for the post-manufacturing thickness of the bottom of the cans, are not designed to reliably ensure a

minimum buckle pressure of 180 PSI. While Hendrickson opines that such intentional design choices create "the possibility" of PAM cans not reliably withstanding pressures of up to 180 PSI, a possibility of a design defect is not the same as an actuality. *See Hicks*, 593 F.3d at 166 ("[A] party may not rely on mere speculation or conjecture as to the true nature of the facts to overcome a motion for summary judgment." (quoting *Fletcher*, 68 F.3d at 1456)). Moreover, that possibility is undercut by the objective evidence in the record: DSC has in place quality assurance procedures that include testing of a can off the production line every ½ hour to ensure that the cans do not buckle at a pressure less than 180 PSI and the manufacturing records of two lots, including the lot containing the Subject Can, show that the pressures measured for all cans tested in that lot were approximately 180 PSI or higher. Conagra's 56.1 ¶ 24–25; Bozick's 56.1 Response ¶ 24–25.

Plaintiff's key evidence—that Defendants' failure to provide such specifications results in some cans exploding at temperatures less than 180 PSI—thus appears to be the Subject Can itself. Hendrickson testified that taking the thinnest portion of the Subject Can measured by the destructive testing, the finite element analysis that he performed indicates that the Subject Can may have buckled at a pressure around 136 PSI. Dkt. No. 79-1 at 101. However, evidence related to the manufacture of a single can is not sufficient for a jury reasonably to find the existence of a design defect, as opposed to a manufacturing defect. *See Koublani v. Cochlear Ltd.*, 2021 WL 2577068, at *13 (E.D.N.Y. June 23, 2021) ("With a manufacturing defect claim, one product has a defect, but with a design defect claim, every product has the defect."); *Colon ex rel. Molina v. BIC USA, Inc.*, 199 F. Supp. 2d 53, 85 (S.D.N.Y. 2001) ("[A] manufacturing flaw exists when the unit in question deviates in quality and other performance standards from

all of the other identical units."). And, even if it were, Hendrickson's opinion is inadmissible under Rule 702.

Rule 702 requires that the evidence or testimony be the "product of reliable principles and methods" and that the expert "reliably appl[y] the principles and methods to the facts of the case." Fed. R. Evid. 702. "[T]he proponent of expert testimony has the burden of establishing by a preponderance of the evidence that the admissibility requirements of Rule 702 are satisfied." *See In re Elysium Health-ChromaDex Litig.*, 2022 WL 421135, at *1 (S.D.N.Y. Feb. 11, 2022) (quoting *Jones*, 965 F.3d at 161). "In deciding whether a step in an expert's analysis is unreliable, the district court should undertake a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and methods to the case at hand." *Id.* (quoting *Amorgianos*, 303 F.3d at 267).

Hendrickson's conclusion that the Subject Can may have buckled at a pressure as low as 136 PSI is unreliable as the finite element analysis, which he used to draw that conclusion, is premised on a misunderstanding—*i.e.*, that the specification of .0138 for the steel governed the thickness of the steel after it was formed. In designing his finite element analysis, Hendrickson testified that he assumed that the bottom of a can would buckle at a pressure lower than 180 PSI if the steel did not meet the manufacturer's thickness specification of .0138 along with the manufacturer's strength specification (which is not at issue here). Dkt. No. 79-1 at 95–100. Applying this analysis, Hendrickson concluded that because the thinnest point on the Subject Can, measured in the destructive testing, was less than .0138, the Subject Can would buckle at a pressure lower than 180 PSI. *Id.* at 101.

However, as Defendants pointed out during Hendrickson's deposition, .0138 is the "tolerance of the material used to make the can bottom and not the tolerances once the can bottom is formed," *id.* at 214–15, as Hendrickson had mistakenly believed, *id.* at 214. Moreover, the evidence indisputably indicates that the bottom of all PAM containers are thinned after they are formed and yet many still withstand pressures up to 180 PSI. In fact, Hendrickson admitted that, as the cans are formed, "the metal will become thinner," *id.* at 70, and noted that the exemplar can that was tested had "points that were slightly below the minimum specification for thickness," *id.* at 71–72. Thus, it is not the case—as Hendrickson had believed—that no point on the bottom of a can may be thinned after formation past the initial pre-manufacturing specification without compromising the can's ability to withstand pressures up to 180 PSI. Instead, as Hendrickson admitted during his deposition, there must be some degree to which a can may thin and still be able to withstand pressures up to 180 PSI, although Hendrickson admitted he did not know exactly what degree that would be. He testified:

> Q: And you—and in order to really come up with a true tolerance, you'd want to know what the thinness or thickness areas are of cans that are manufactured properly and do, you know, retain their integrity up through 180 psi, correct?
>
> A: That's what I would do. I would make sure I understood exactly how the metal changes from the time its sheet to when it's formed into a dome with the flat top on it to see how much that changes the hardness of the material and its thickness.
>
> Q: Okay. And without having done that analysis, it's possible at least that the measurements in the Bozick can and the measurements in the Ramaj can, that those, for all we know, could be within that tolerance; we just don't know what the tolerance is or what the measurement is supposed to be. Is that fair?
>
> MR. SERBY:· Objection.
>
> A: Well, there is no—you can't say whether it's within the tolerance or not until you specify what the dimension is.

See Dkt. No. 79-1 at 215–17.

This failure to "come up with" the "true tolerance" is fatal to Hendrickson's attempt to draw particular conclusions from his analysis. Without knowing how much a can may thin and still "retain [its] integrity up through 180 psi," Hendrickson cannot reliably determine whether a particular can may withstand pressure up to 180 PSI based solely on the fact that portions of the can are thinner than the pre-manufacturing specifications. Accordingly, the mere fact that the Subject Can had certain points on its bottom thinner than the .0138 pre-manufacturing specification does not, contrary to Hendrickson's analysis, lead to the conclusions that the Subject Can would burst at pressures lower than 180 PSI.

Hendrickson's opinion therefore that Plaintiff's failure to maintain specifications as to the post-manufacturing thickness of its PAM original results in certain cans buckling at pressures below 180 PSI lacks "good grounds" and is inadmissible. *Amorgianos*, 303 F.3d at 266–67 (citation omitted) (expert testimony should be excluded where it is based on "data, a methodology, or studies that are simply inadequate to support the conclusions reached"). Without the results of his faulty finite element analysis, Hendrickson has pointed to no datapoint substantiating this claim. And, because Plaintiff offers no other expert testimony in support of her claim that Defendants' lack of post-manufacturing specifications as to the thickness of the steel on the bottom of the cans resulted in cans buckling at pressures below 180 PSI, Plaintiff has failed to create a triable as to the existence of a design defect under this theory. *See Urena*, 2020 WL 3051558, at *12 ("[C]omplex cases in which 'lay jurors simply are not equipped with the relevant background knowledge' 'require an expert opinion as to defect and as to feasible alternative design." (citation omitted)).

2. Design Defect Claim Based on BLCBE

In support of its alternative theory that the PAM container exploded due to a BLCBE event, Plaintiff relies entirely on the opinions of its expert, Eagar. Those opinions are:

- Opinion 9 – A mixture of cooking oil and hydrocarbon propellant is susceptible to a BLEVE or BLCBE due to a local pressure release such as using the cooking spray as directed. This is not controlled directly by the temperature of the container, but is more likely in warmer containers within the temperature ranges found and expected in kitchens. A BLCBE will result in a pressure spike sufficient to cause eversion of the bottom, with catastrophic release of the flammable components in the container.

- Opinion 10 – The instruction to "Shake Well" before use of the PAM® as well as the process of spraying product from the container sets up the potential for BLCBE.

Eagar Report at 25–27. Because this theory of design defect is based solely on the expert testimony of Eagar and Defendants have moved to exclude Eagar's testimony as to the possibility of a BLCBE's under Rule 702, the Court addresses that preliminary issue.

In its *Daubert* motion, Defendants move to exclude Eagar's opinions related to his hypothesis that that PAM containers may explode due to a BLCBE or that a BLCBE occurred in the Subject Can as speculative. Dkt. No. 81 at 14–15. Specifically, Defendants note that while Eagar states that BLCBE is a theoretical phenomenon with a "multi step" process, Eagar fails to apply those steps in the context of PAM cooking spray other than at a high level of generality. *Id.* at 14. Defendants also contend that even if this theoretical phenomenon could occur in a can of PAM cooking spray, Eagar failed to analyze whether any of the steps of a BLCBE were met under the facts Plaintiff alleges. *Id.* Finally, Defendants note that Eagar himself admitted that he could not testify to this BLCBE opinion to a reasonable degree of engineering certainty. *Id.* at 15 (citing Dkt. No. 81-1 at 241:20–242:2).

Plaintiff responds that Defendants' characterization of a BLCBE as only a theoretical phenomenon is inaccurate and "ignores the extensive list of scientific literature and studies cited by" Eagar. Dkt. No. 98 at 14. Plaintiff also contends that Conagra is incorrect that Eagar has not rendered his opinions regarding a BLCBE to a reasonable degree of scientific certainty and that Eagar's testimony that a BLCBE is "one of two" possible causes for the failure of the Subject

Can does not render either of the theories inadmissible as Plaintiff is not required to identify a specific defect in a product in order to demonstrate the existence of a defect. *Id.* at 16.

A "trial judge should exclude expert testimony if it is speculative or conjectural." *Zerega Ave. Realty Corp. v. Hornbeck Offshore Transp.*, *LLC*, 571 F.3d 206, 214 (2d Cir. 2009). The trial court's job is to make "certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Carmichael*, 526 U.S. at 152. Moreover, in evaluating whether expert testimony is proper, the district court may evaluate the "fit between the experts' opinions and the scientific literature on which they relied." *Amorgianos*, 303 F.3d at 269. Expert testimony is also excludable where the expert fails to "reliably ap[y] the principles and methods to the facts of the case." Fed. R. Evid. 702(d).

Here, Eagar's testimony is excludible for two reasons. First, Eagar fails to reliably apply "the principles and methods to the facts of the case." Fed. R. Evid. 702(d). In reaching his opinion that a "mixture of cooking oil and hydrocarbon propellent is susceptible to a" BLCBE due to local pressure release, Eagar cites a paper published in the *Journal of Hazardous Materials* that states that a BLCBE results "from a complex multi-step adaptive and coherent bubble formation-growth-collapse process in a pressure liquefied gas *and* its interaction with the containment vessel." Eagar Report at ECF p. 27. The paper then lists eight steps of that "process," including "partial vessel failure (*i.e.*, a 'sub-critical' sized crack or opening)," and "the rapid depressurization of an already nucleated and now super-heated liquid." *Id.* Without engaging with any of these eight steps, Eagar concludes that such a BLCBE may occur in a PAM container and that "[t]he instruction to 'Shake Well' before use of the PAM as well as the process of spraying product from the container sets up the potential for BLCBE." *Id.* at ECF p.

28. This conclusion leaves open more questions than it answers: For example, Eagar fails to explain why the first step of a BLCBE, "a partial vessel failure," would be met purely by "spraying product from the container"—an action that in no way resembles a "'sub-critical' sized crack or opening." *Id.* at ECF p. 27–28. In addition, even assuming that the "process of spraying product from the container sets up the potential for BLCBE," *id.* at ECF p. 28, Eagar does not explain why the can did not explode until approximately fifteen minutes after Plaintiff sprayed it. Eagar also implies that a key trigger of the BLCBE is shaking the can; however, when asked at his deposition whether Plaintiff shook the can before using it, Eagar stated that he did not "remember [her] testifying to it." Dkt. No. 82-1 at 240. These opinions are thus excludable as Eagar fails to "fit" "the scientific literature on which [he] relied" to the opinions that he draws from them. *Amorgianos*, 303 F.3d at 269.

Eagar's expert opinion is also excludable as it overly speculative. When asked at his deposition whether he had "endeavor[ed] to kind of tease out all these variables that might impact the BLCBE event," Eagar responded:

> No. Right there on page 26, there's a— there's a[n] eight-step process. Okay. And I can't tell you everything about each one of those eight steps, but I can tell you that it's a real physical phenomena and people have spent hundreds of thousands of dollars studying it and demonstrating it. And I think it's been demonstrated fairly well scientifically.

Dkt. No. 82-1 at 241. Eagar was also asked if he would "opine to . . . a reasonable degree of engineering certainty that the cause of the container buckling in either case was a BLCBE event." *Id.* Eagar responded: "I said I can't separate that out from the probability of a static event due to the thinning due to the necking." *Id.* at 241–42. Eagar's opinion that a BLCBE was the cause of Plaintiff's injuries is thus overly speculative and inadmissible on that basis.[10] *See*

[10] Plaintiff appears to argue that Eagar's testimony can be speculative because, under New York law, a plaintiff is not required to identify a specific defect in order to demonstrate the existence

Zerega Ave. Realty Corp., 571 F.3d at 214 ("[T]rial judge should exclude expert testimony if it is speculative or conjectural.").

Without Eagar's testimony, Plaintiff is unable to sustain its burden of proving that the PAM product is defectively designed as a result of its potential for a BLCBE. Because of Plaintiff's lack of expert evidence to show design defect under either theory, no genuine issue of material fact exists, and Plaintiff's defective design claim fails as a matter of law. *See Urena*, 2020 WL 3051558, at *13 (stating that "New York law requires the testimony of an expert witness, *i.e.*, testimony that is beyond the ken of the average layperson, to prove a design's defectiveness" (internal quotation marks and citation omitted)).

B. Manufacturing Defect Claims

"Unlike a design defect claim, a manufacturing defect claim is based on an allegation that the specific product that caused plaintiff's injury was not manufactured as designed." *Tears v. Bos. Sci. Corp.*, 344 F. Supp. 3d 500, 510 (S.D.N.Y. 2018) (Nathan, J.). "To plead and prove a manufacturing flaw under either negligence or strict liability, the plaintiff must show that a specific product unit was defective as a result of 'some mishap in the manufacturing process itself, improper workmanship, or because defective materials were used in construction,' and that the defect was the cause of plaintiff's injury." *BIC USA, Inc.*, 199 F. Supp. 2d at 85 (citation omitted). "[A] claim devoid of allegations that a particular unit differed when compared to others in the same product line will be dismissed." *Guariglia v. Procter & Gamble Co.*, 2018 WL 1335356, at *5 (E.D.N.Y. Mar. 14, 2018); *see Tears*, 344 F. Supp. 3d at 510. "A plaintiff

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of a design or manufacturing defect. Dkt. No. 94 at 16. But, while this is a correct description of New York law, *see Zsa Zsa Jewels, Inc. v. BMW of N. Am., LLC*, 419 F. Supp. 3d 490, 509 (E.D.N.Y. 2019), it is wholly inapposite. Plaintiff is not seeking to use Eagar's testimony to demonstrate the existence of some unspecific defect. Instead, the question is whether Eagar's testimony is admissible to prove a specific defect—here, the possibility for a BLCBE.

who cannot prove a specific design or manufacturing defect through expert testimony or other direct evidence may [] prevail on the basis of circumstantial evidence alone." *Zsa Zsa Jewels, Inc. v. BMW of N. Am., LLC*, 419 F. Supp. 3d 490, 509 (E.D.N.Y. 2019). "Under this circumstantial approach, 'in order to proceed in the absence of evidence identifying a specific flaw, a plaintiff must prove that the product did not perform as intended and exclude all other causes for the product's failure that are not attributable to defendants.'" *Id.* at 510 (quoting *Riegel v. Medtronic, Inc.*, 451 F.3d 104, 125 (2d Cir. 2006)).

Plaintiff's manufacturing defect claim is based both on expert evidence as to a specific manufacturing design defect as well as circumstantial evidence of an unspecified defect. The Court addresses each theory in turn.

1. Specific Manufacturing Defect

In moving for summary judgment on Plaintiff's claim that a specific manufacturing defect in the Subject Can caused her injuries, Defendants argue that Plaintiff fails to show that the Subject Can differed, due to this alleged specific manufacturing flaw, from any other cans manufactured by Defendants. Defendants contend that Plaintiff's hypothesized manufacturing defect—based on a small variation in thickness of the metal used to form the bottom of the can—was tested and disproven through destructive testing. Dkt. No. 93 at 25. Defendants also argue that Plaintiff's theory that portions of the can bottom impermissibly thinned during manufacturing is not a manufacturing defect as all PAM cans thin during manufacturing. *Id.* at 26. Finally, Defendants argue that Eagar's calculation of a statistical probability of a hypothetical can being unable to withstand a pressure of less than 180 PSI is not evidence that this particular can was defectively manufactured. *Id.* Plaintiff responds that, contrary to Defendants' claims, destructive testing actually demonstrated that the manufactured thickness of the steel of the bottom of the Subject Can was significantly thinner than the specified thickness

of the raw steel used to make the can and that such areas of thinness were more prevalent and severe in the Subject Can than the exemplar can. Dkt. No. 105 at 27.

For the reasons discussed by Defendants, Plaintiff does not raise a triable issue as to the existence of a specific manufacturing defect. First, any claim of manufacturing defect based on the theory that the thickness of the steel used to form the bottom of the subject can was deficient is foreclosed by the results of the destructive testing. That destructive testing showed that the Subject Can was formed using raw steel that met Defendants' thickness specifications. As Easley stated, PAM 2Q cans are required to be made from Tin Free Steel having a nominal thickness of .0138 inch with a tolerance of +.0003 inches, Easley Report at 6, and the destructive testing showed that the minimum thickness of the center region of the bottom of the Subject Can—the area least likely to be impacted by manufacturing—fell within that specification, *id.* at 16. From this, Easley concluded that "the subject can was manufactured with bottom steel thickness . . . conforming to the design specifications." *Id.* at 19. Plaintiff presents no evidence undercutting, or raising a triable issue with respect to, this conclusion. *See* Dkt. No. 94-16 (Eagar Rebuttal Report: accepting this as true but saying that "this is not the issue in question."); Dkt. No. 94-4 at 70 (Hendrickson Deposition: agreeing that the destructive testing "shows that the steel used to form the bottom was within spec.").

In addition, Plaintiff's argument that even if the raw steel used to make the can was originally within specification, the steel impermissibly thinned during manufacturing does not support a manufacturing defect claim. While Plaintiff states that the thickness of certain areas of the bottom of the Subject Can fell under the .0138 inch thickness specification, that specification governs the thickness of the *raw material* used to make the Subject Can, not the thickness of the steel *after* it was formed. And, Plaintiff points to no specifications or performance standards

maintained by Defendants that govern the thickness of the bottom of PAM cans *after* they are formed. *See* Dkt. No. 94-4 at 70 (Hendrickson Deposition) (Question: "is there a spec, a specific spec for after the can bottom is formed of what the thickness should be anywhere on the dome?" Answer: "As far as I know, no."). Such post-manufacturing thinning therefore cannot be said to be contrary to any "plans and specifications of the manufacturer." *Cuntan v. Hitachi KOKI USA*, Ltd., 2009 WL 3334364, at *17 (E.D.N.Y. Oct. 15, 2009). Plaintiff moreover agrees that "some thinning occurs in every can manufactured by DSC." Dkt. No. 104 (Plaintiff's response to 56.1 statement). Thinning alone is thus not evidence "that the Product had a manufacturing defect when compared to other 'PAM' cooking sprays in the market." *Cowan v. Costco Wholesale Corp.*, 2017 WL 59080, at *3–4 (E.D.N.Y. Jan. 5, 2017) ("[A] manufacturing defect exists when the unit in question deviates in quality and other performance standards from all of the other identical units"); *see Schmidt*, 2020 WL 7027445, at *8 ("[L]ocal disparities observed in the direct measurements of the subject can do not establish a manufacturing defect because similar variations were observed in the unvented exemplar can.").

Plaintiff's claim that the areas of post-manufacturing thinness were particularly prevalent and severe in the Subject Can does not change this analysis. In sole support of this claim, Plaintiff notes that the destructive testing revealed that "[o]f the 67 measurements taken from the Subject Can, 11 of them—or approximately 16.4%—fell below the fell below the specified tolerance minimum of .0135 inches for the raw steel, with the lowest measurement being .0127 inches," Dkt. No. 105 at 28, whereas "only two measurements—or approximately 6.4% of the total measurements—taken from the exemplar can deviated from the specification of the raw material; and the lowest measurement taken was .0130 inches," *id*. However, disparities in the post-manufacturing thickness of two cans does not create a triable issue that one—by virtue of

being different than the other—was improperly manufactured. With only two datapoints, it is just as likely that the post-manufacturing thickness of the bottom of the Subject Can was more representative of the properly manufactured PAM can than was the exemplar can. *See Urena*, 2020 WL 3051558, at *12 ("A manufacturing flaw exists when the unit in question deviates in quality and other performance standards from all of the other identical units." (citation omitted)). Furthermore, even if two datapoints were sufficient, Plaintiff does not present admissible evidence that this post-manufacturing thinness caused the can to vent at pressures below 180 PSI. As noted in Section I.A.1, Hendrickson's testimony that this post-manufacturing thinning caused the Subject Can to vent at a pressure below 180 PSI is inadmissible under Rule 702.

Finally, Eagar's calculation that *some* PAM cans—based on a statistical analysis—may not withstand a pressure of less than 180 PSI also does not support that this *particular* can was defectively manufactured. As Judge Underhill noted in *Schmidt,* "[a]lthough the Plaintiffs assert that 'one out of a million' PAM cans will vent at low pressure, they have not explained why this can is the 'one.'" *Schmidt*, 2020 WL 7027445, at *12. Plaintiff therefore has not presented sufficient evidence to create a triable issue of fact as to any of Plaintiff's proffered specific manufacturing defects.

2. Circumstantial Evidence of a Defect

Yet, while Plaintiff does not present sufficient evidence of a specific manufacturing defect, Plaintiff does create a triable issue of fact as to the existence of a non-specific defect on the basis of circumstantial evidence.[11] Under New York law, "[a] plaintiff who cannot prove a

[11] Defendants appears to argue that such a claim fails because similar claims of defect based on circumstantial evidence were rejected in two prior cases involving PAM cooking spray. Dkt. No. 93 at 28–29 (citing *Schmidt*, 2020 WL 7027445, at *9 and *Thomas v. ConAgra Foods, Inc.*, 2021 WL 1176011, at *4 (W.D.N.Y. Mar. 29, 2021)). *Schmidt* is distinguishable as it involved the application of Connecticut law, not New York law, and the court held that, under Connecticut law, this theory of liability was not available where "the subject can was available for inspection

specific design or manufacturing defect through expert testimony or other direct evidence may [] prevail on the basis of circumstantial evidence alone." *Zsa Zsa Jewels, Inc.*, 419 F. Supp. 3d at 509. "Under this circumstantial approach, 'in order to proceed in the absence of evidence identifying a specific flaw, a plaintiff must prove that the product did not perform as intended and exclude all other causes for the product's failure that are not attributable to defendants.'" *Id.* at 510 (quoting *Riegel*, 451 F.3d at 125). The New York Court of Appeals has described the application of the circumstantial approach as a two-part inquiry, stating: "It may be inferred that the harm sustained by the plaintiff was caused by a product defect existing at the time of sale or distribution, without proof of a specific defect, when the incident that harmed the plaintiff: (a) was of a kind that ordinarily occurs as a result of product defect; and (b) was not, in the particular case, solely the result of causes other than product defect existing at the time of sale or distribution." *Speller ex rel. Miller v. Sears, Roebuck & Co.*, 790 N.E.2d 252, 255 (N.Y. 2003) (citation omitted).

"This rule traces its historical antecedents to the law of negligence and the doctrine of *res ipsa loquitur*, which permits a trier of fact to infer that the harm suffered by a plaintiff was caused by the negligence of the defendant when the event is of a kind that ordinarily does not occur in the absence of negligence and other responsible causes are eliminated by the evidence."

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by the parties." 2020 WL 7027445, at *9. No such requirement is present under New York law. *See Lynch v. Trek Bicycle Corp.*, 374 F. App'x 204, 206 (2d Cir. 2010) (circumstantial evidence theory of defect applied where bike was available for inspection); *Halloran v. Virginia Chemicals Inc.*, 361 N.E.2d 991 (N.Y. 1977); *Codling v. Paglia*, 32 N.Y.2d 330 (N.Y.1973); *Gargano v. Rosenthal*, 473 N.Y.S.2d 225 (2d Dep't 1984). The court's decision in *Thomas* is inapposite and, if anything, supports Plaintiff's claim. 2021 WL 1176011. The court in *Thomas* acknowledged that New York law allows a plaintiff to prove a case of manufacturing or design defect based on circumstantial evidence of a "non-specific defect," but held that New York law does not recognize a separate, independent cause of action for non-specific defect. *Id.* *4. The court therefore dismissed plaintiff's standalone claims of non-specific defect as duplicative of plaintiff's manufacturing and design defect claims. *Id.*

Zsa Zsa Jewels, Inc., 419 F. Supp. 3d at 510. "This doctrine recognizes that, generally, in the absence of a defect, chairs do not suddenly collapse, bicycles do not randomly snap apart, and kitchen appliances do not spontaneously combust." *Id.*; *see* Restatement (Second) of Torts § 328D (1965) ("On the other hand there are many events, such as . . . the derailment of trains or the explosion of boilers, where the conclusion is at least permissible that such things do not usually happen unless someone has been negligent."). "When such extraordinary events occur, the factfinder may infer that there was something wrong with the product, even if the precise mechanism at fault cannot be identified." *Zsa Zsa Jewels, Inc.*, 419 F. Supp. 3d at 510; *see* Restatement (Third) of Torts: Prod. Liab. § 3 (1998) ("Under those circumstances, the plaintiff need not specify the type of defect responsible for the product malfunction.").

In establishing a manufacturing defect based on circumstantial evidence alone, "the plaintiff must first establish that the injury 'was of a kind that ordinarily occurs as a result of a product defect.'" *Zsa Zsa Jewels, Inc.*, 419 F. Supp. 3d at 510 (quoting *Speller*, 790 N.E.2d at 255). Here, this requirement is undoubtedly met. A household product bursting into flames or combusting when that product is used by a consumer in a foreseeable manner is precisely the type of extraordinary incident that generally does not occur absent negligence. *See Zsa Zsa Jewels, Inc.*, 419 F. Supp. 3d at 510 ("kitchen appliances do not spontaneously combust."); *Speller*, 790 N.E.2d at 253–54 (involving fire originating from refrigerator); *cf. Halloran v. Virginia Chemicals Inc.*, 361 N.E.2d 991, 994 (1977) (involving can of refrigerant exploding); Restatement (Second) of Torts § 328D (1965) ("On the other hand there are many events, such as . . . the explosion of boilers, where the conclusion is at least permissible that such things do not usually happen unless someone has been negligent."). "Common knowledge" teaches that cans of cooking oil do not just explode into a ball of fire purely because they are placed in a

kitchen near a stove for a reasonable period of time—some negligence generally must be at play. *Kambat v. St. Francis Hosp.*, 89 N.Y.2d 489, 497 (N.Y. 1997).

Defendants nonetheless attempt to argue that Plaintiff's injury is not of the type that ordinarily occurs as a result of a product defect because it can be explained by operator error. Specifically, Defendants state that "[a]n aerosol can that over-pressurizes is like a car that may crash" as "both can be explained by operator error"; it "is not like a chair that suddenly collapses, or bicycle that snaps apart." Dkt. No. 93 at 30. This argument is unconvincing at this stage. All four of these incidents can occur as a result of operator error. A chair may collapse because someone places an extremely heavily box on it or a bicycle may snap apart because the user leaves it outside under harsh conditions for months at a time or crashes it at a high speed into a sharp and immovable object. This cannot be the dispositive factor. Further, if the absence of the possibility for operator error was necessary to find that the incident is the type that ordinary occurs as a result of product defect, then the second part of the inquiry that governs application of the circumstantial approach—*i.e.*, that all other causes for the product's failure that are not attributable to defendants have been ruled out—would be meaningless. *See Speller*, 790 N.E.2d at 255. The operative question thus is not—as Defendants argue—whether the incident *can* occur by operator error but whether it is of the type that ordinarily does not occur absent a product defect. *Id.* A can of cooking oil exploding merely because it is a left near a stove generally does not occur absent a product defect. The same could also be said of a car that crashed because its breaks stopped working.

Because the injury is of the type that would ordinarily not occur absent a defect in the product, the next question is whether Defendants have proffered "admissible evidence that the accident could have been caused by something not attributable to itself." *Florentino v. Am. Lifts*,

2008 WL 11417177, at *8 (E.D.N.Y. Apr. 15, 2008); *see Zsa Zsa Jewels, Inc.*, 419 F. Supp. 3d at 520 ("[D]efendant bears [the] burden of offering some 'evidence in admissible form establishing that the plaintiff's injuries were not caused by a . . . defect in the product.'" (citation omitted)); *Winckel v. Atl. Rentals & Sales, Inc.*, 557 N.Y.S.2d 951, 953 (2d Dep't 1990) ("[D]efendants failed to offer any cogent reason for the chair's collapse, and the plaintiffs were entitled to rely on circumstantial evidence."). And, if so, whether Plaintiff has presented "competent evidence" rebutting Defendants' alleged other causes for the incident sufficient to create an issue for trial. *Speller*, 790 N.E.2d at 256. If Plaintiff presents competent evidence creditable by a jury sufficient to rebut Defendants' alternative cause evidence, then summary judgement in favor of the Defendants is not warranted as Plaintiff has "raised a triable question of fact" from which a "reasonable jury could conclude that [P]laintiffs excluded all other causes of the fire." *Id.*

With respect to an alternative cause of Plaintiff's injuries, Defendants have proffered evidence that the accident was caused by something not attributable to themselves—specifically that Plaintiff overheated the can in violation of the warnings and instructions for use. Defendants base this claim on evidence that the Subject Can was properly manufactured and therefore could not have exploded at any pressure less than the 180 PSI pressure specification. Dkt. No. 93 at 29. They point to evidence that (i) destructive testing of the Subject Can proved that it was made with raw steel that met specification; (ii) undisputed manufacturing records establish that all cans tested in the relevant lot met the 180 PSI pressure specification prior to buckling/venting (*see* Shipley Report at 12–13); (iii) Plaintiff testified that she used the Subject Can every week for nineteen months without problems. *Id.*

As an initial point, while this evidence does support Defendants' claim that they are not at fault, none of this evidence is as unequivocal as Defendants state. It is true that the destructive testing showed that the raw steel that was used to make the Subject Can met specifications; that destructive testing, however, did not rule out all other potential causes of manufacturing defect. Similarly, the fact that certain cans in the lot of cans which contained the Subject Can were tested and passed quality assurance procedures does not establish that this *particular* can was not defective, particularly where there is no allegation that this *particular* can was one of the cans tested. In addition, Plaintiff's testimony that she used the Subject Can every week for nineteen months without problem does not rule out that the Subject Can was defective. It is possible that the product's defective nature did not appear until after sustained and significant use of the product, and a consumer does not expect a can of cooking spray to explode even after nineteen months of use. This evidence is also two-sided: While a jury may be able to infer from this extended period of use that the Subject Can was not defective, a juror may just as likely infer that the Plaintiff knew how to use the product and would not have subjected it to pressure in excess of 180 PSI.

Yet, not only is this evidence not as clear-cut as Defendants' claim, but Plaintiff has offered competent evidence to rebut this theory through her own testimony that she did not overheat the can in violation of its warnings. Plaintiff testified that she placed the Subject Can approximately seven inches from the edge of the stove and thirteen inches from the center of the burner. Conagra's 56.1 ¶ 32; Bozick's 56.1 Response ¶ 32. She then turned the front left burner of the stove on "HI," cooked the steak for about six to eight minutes, and turned the burner off for one to five minutes before turning the burner back on "LO." Conagra's 56.1 ¶¶ 33–36; Bozick's 56.1 Response ¶¶ 33–36. After approximately five minutes, she walked to the kitchen

and the PAM can exploded. Conagra's 56.1 ¶¶ 37–39; Bozick's 56.1 Response ¶¶ 37–39. Defendants' expert does not dispute that if Bozick's account of events are true, Bozick would not be responsible for the explosion as the Subject Can could not have possibly reached a pressure close to the 180 PSI. *See* Dee Report at 17 ("[H]er testimony does not establish a set of conditions that would cause the subject can to vent due to overheating.").

Plaintiff's eyewitness testimony about her conduct, if credited by a jury, is sufficient to raise a triable issue from which a "reasonable jury could conclude that" she excluded "all other causes of the fire," namely Defendants' theory that she overheated the Subject Can. *Speller*, 790 N.E.2d at 256. Courts have repeatedly held that a Plaintiff's eyewitness testimony alone may be used to rebut a defendants' expert as to circumstantial evidence of a product defect. *See Lynch v. Trek Bicycle Corp.*, 374 F. App'x 204, 207 (2d Cir. 2010) (noting that "even without expert testimony" plaintiff's "own testimony about how the bicycle broke and how the accident occurred" may be "competent evidence entitling him to a jury trial"); *Zsa Zsa Jewels, Inc.*, 419 F. Supp. 3d at 521 ("Of course, the mere fact that a jury could credit this testimony does not mean that it must. At trial, Defendants will be free to persuade the jury that her account should not be believed."); *Lynch v. Trek Bicycle Corp.*, 2011 WL 1327032, at *4 (S.D.N.Y. Mar. 30, 2011); *Florentino*, 2008 WL 11417177, at *8.

Plaintiff therefore has raised a triable issue of fact as to the existence of an unspecified manufacturing defect in the Subject Can, which caused her injuries. Summary judgment in favor of the Defendants is therefore denied as to the existence of an unspecified manufacturing defect.

C. Failure to Warn Claim

Under New York law, a manufacturer is liable for its "failure to warn of the risks and dangers associated with the use of its product. That duty generally extends to warning ultimate consumers of the dangers resulting from the foreseeable use of the product." *Clinton v. Brown &*

Williamson Holdings, Inc., 498 F. Supp. 2d 639, 643 (S.D.N.Y. 2007) (*Urena v. Biro Mfg. Co.*, 114 F.3d 359, 366 (2d Cir. 1997)). "In order to recover under a failure to warn theory, a claimant must show: '(1) that a manufacturer has a duty to warn; (2) against dangers resulting from foreseeable uses about which it knew or should have known; and (3) that failure to do so was the proximate cause of harm.'" *Quintana v. B. Braun Med. Inc.*, 2018 WL 3559091, at *5 (S.D.N.Y. July 24, 2018) (quoting *Am. Guarnatee & Liab. Ins. Co. v. Cirrus Design Corp.*, 2010 WL 5480775, at *3 (S.D.N.Y. Dec. 30, 2010)). "As part of satisfying those elements, a plaintiff is required to prove that the product did not contain adequate warnings." *Urena*, 2020 WL 3051558, at *14 (quoting *Quintana*, 2018 WL 3559091, at *5). "The failure to provide warnings gives rise to liability not only against the manufacturer, but against the distributor and retailer as well." *Id.* (citation omitted).

Regarding the first and second elements, a "manufacturer has a duty to warn against latent dangers resulting from foreseeable uses of its product of which it knew or should have known. This duty is a continuous one, and requires that the manufacturer be aware of the current information concerning the safety of its product." *Urena*, 2020 WL 3051558, at *14 (citation omitted). Regarding the third element, to constitute proximate cause, "an inadequate warning must be a substantial cause of the events leading to the injury. An act cannot be the 'substantial cause' if the injury would have occurred regardless of the content of defendant's warning." *Figueroa v. Bos. Sci. Corp.*, 254 F. Supp. 2d 361, 370 (S.D.N.Y. 2003).

"Claims regarding the adequacy of a warning are normally fact-specific and are usually best reserved for trial." *Wu Jiang v. Ridge Tool Co.*, 764 F. App'x 43, 45 (2d Cir. 2019). However, "[w]hen a warning raises no triable questions of fact as to adequacy . . . summary judgment may be granted." *Id.*

Defendants argue that Plaintiff's failure to warn claim fails as a matter of law because there is no evidence that Conagra had knowledge or that it was foreseeable that PAM cooking spray could explode under the circumstances Plaintiff describes. Dkt. No. 93 at 31. Defendants also argue that summary judgment is appropriate as Plaintiff testified she read the warning label and that she understood that she should not place the can close to heat because it could cause it to "explode." *Id.* at 32. Plaintiff responds that while she had read the warning labels at some point in the past, she did not state whether she read the warnings on the "two-piece bottom-scored can design utilizing the extremely flammable A70 propellant, or if she read the labels contained on a previous version of the PAM Original cans before ConAgra began using the two-piece vented can design or a different propellant." Dkt. No. 105 at 33. Finally, Plaintiff argues that the warning label is not adequate to inform consumers of the risks or how to use the product safely, as it does not include language such as "Danger" or "Extremely Flammable," nor does it advise consumers of potential hazards associated with the can bursting. *Id.* Furthermore, the label does not define what "near" a stove or heat source is. *Id.*

Defendants are entitled to summary judgment on Plaintiff's failure-to-warn claim. To the extent that Plaintiff argues that Defendants failed to warn of the possibility of cans exploding under the circumstances present in Plaintiff's kitchen on the date of her accident, Plaintiff offers no evidence that Defendants "knew or should have known" of such a possibility. *See Quintana*, 2018 WL 3559091, at *5; *Bee v. Novartis Pharms. Corp.*, 18 F. Supp. 3d 268, 283 (E.D.N.Y. 2014) ("[S]ummary judgment is appropriate where a plaintiff has not introduced any evidence that a manufacturer knew or should have known of the danger at issue."). As Plaintiff stated in her 56.1 response, "[i]t is undisputed that Plaintiff has not alleged at any time that the Subject Can was heated to temperatures above 140°F (corresponding to an internal pressure far below

180 PSI), and that neither Plaintiff's experts nor Conagra's experts have been able to propose any plausible scenario consistent with the evidence in which the Subject Can could have reached such a temperature, despite the fact that it indisputably vented and released its contents." Bozick's 56.1 Response ¶ 68. Plaintiff's experts also agree that "PAM Cooking Spray would not reach an internal pressure of 180 PSI under reasonable or foreseeable use conditions," although they believe "that the cans are not adequately designed to reliably withstand pressures up to 180 PSI before releasing their contents." *Id.* ¶ 68. However, as discussed in Section I.A.1, Plaintiff has failed to proffer admissible evidence that PAM Original cans did not reliably withstand pressures up to 180 PSI, let alone evidence that Defendants knew or should have known that they did not. In fact, the evidence in the record clearly establishes that the cans were subjected to quality assurance testing to ensure that did withstand pressure in excess of 180 PSI. Without evidence of Defendants' knowledge or reason to know of the possibility of an explosion from the circumstances Plaintiff describes, Plaintiff cannot claim that Defendants should have warned consumers of such dangers. *See Lyman v. PetSmart, Inc.*, 2018 WL 4538908, at *10 (S.D.N.Y. Sept. 21, 2018) ("Under New York law, 'a duty to warn arises only where there is actual or constructive notice of a danger.'" (citation omitted)); *Maguire v. Southland Corp.*, 665 N.Y.S.2d 680, 681 (2d Dep't 1997) ("Without evidence legally sufficient to permit a jury to rationally infer that the defendant had constructive notice of a dangerous condition, the defendant cannot be held liable for failure to warn or to remedy the defect.").

PAM also specifically warned consumers of those risks of which Defendants had constructive notice: The Subject Can warned consumers that it was "FLAMMABLE," that the "CAN MAY BURST IF LEFT ON STOVE OR NEAR HEAT SOURCE," and "DO NOT

STORE ABOVE 120°F." Conagra's 56.1 ¶ 19; Bozick's 56.1 Response ¶ 19 ("Undisputed that the container includes the warnings listed.").

Plaintiff nonetheless appears to argue that these warnings are insufficient as the Subject Can did not include the language "Danger," or "Extremely Flammable," nor did it warn of the potential consequence or hazards of the can bursting, or detail exactly what "near" a heat source meant. Dkt. No. 105 at 32. But, even if the failure to include this specific language could be characterized as inadequate, which the Court doubts, a "defendant's liability [does] not arise from a breach of duty alone." *Burke v. Spartanics, Ltd.*, 252 F.3d 131, 139 (2d Cir. 2001) (applying New York law). "Instead, the plaintiff must show, in addition, that 'the failure to warn [was] a substantial cause of the events which produced the injury.'" *Id.* (quoting *Billsborrow v. Dow Chem., U.S.A.*, 579 N.Y.S.2d 728, 733 (2d Dep't 1992)). Here, however, there is no evidence that Defendants' failure to include any of Plaintiff's proposed language caused Plaintiff's injuries. *See Urena*, 2020 WL 3051558, at *15 ("Plaintiffs . . . cannot show that the absence of this warning about venting caused Lucita's injuries."). Specifically, there is no evidence that Plaintiff would not have purchased the product if given any of these proposed warnings, that she misunderstood the risks as a result of Defendants' failure to give them, or that Plaintiff would have used the product any differently had Defendants given a different warning. Dkt. No. 94-8 (Q: "And did you analyze whether your exemplar label would have prevented the incident in the Bozick case if it had been used?" Kitzes: "nobody can say that except Ms. Bozick. I can't predict one person's behavior."). To the contrary, Plaintiff clearly stated that she understood the relevant risks about the product. *See Spartanics, Ltd.*, 252 F.3d at 139 (no proximate causation for duty to warn claim where "the risk was well understood by the plaintiff"); *Ramos v. Simon-Ro Corp.*, 2008 WL 4210487, at *12 (S.D.N.Y. Sept. 11, 2008)

("Futility of a warning may be demonstrated by showing that 'the risk was well understood by the plaintiff,' and therefore 'a warning would have made no difference.'" (citation omitted)). When asked whether she understood the word "flammable" on the label, Plaintiff testified during her deposition that she understood the word to mean that PAM "can explode," and that she understood "from the warning, not to allow the can to overheat." Dkt. No. 103-3 at 94–95. She also testified that "of course" she "knew not to put it close to the heat." *Id.* at 96. There is also no dispute that if her testimony is credited, she did not "put [the can too] close to the heat" (whatever that warning meant exactly) on the night of the incident, *id.*, and therefore a more specific warning about what "close" meant "would have made no difference," *Simon-Ro Corp.*, 2008 WL 4210487, at *12. Thus, "Plaintiff[] cannot meet [her] burden to establish proximate causation between the warning label and the alleged incident" and, accordingly, "the Court grants summary judgment to Defendants on [Plaintiff's] failure-to-warn claim." *Urena*, 2020 WL 3051558, at *15; *see Reece v. J.D. Posillico, Inc.*, 83 N.Y.S.3d 672, 676 (2d Dep't 2018) ("[A] plaintiff must prove causation, *i.e.*, that if adequate warnings had been provided, the product would not have been misused.").

D. NY GBL § 349 Claim

Defendants also contend that Plaintiff is unable to sustain a claim under NY GBL § 349. Dkt. No. 93 at 33. In particular, they contend that Plaintiff presents no evidence that Defendants "knew" of a defect about which they allegedly failed to inform consumers. Defendants also contend that, even if they were aware of this information and did not disclose it, an omission only becomes a misrepresentation when it renders other statements made by a defendant misleading. *Id.* at 33–34. Plaintiff responds that this argument ignores evidence that Defendants were aware of the defect, including that Conagra settled a case concerning an explosion of the same product under substantially similar circumstances and that Conagra was aware of other

similar customer complaints as early as 2012. Dkt. No. 105 at 34–35. Finally, she notes that instead of issuing a recall or updated safety warnings, Conagra eventually switched to using a non-vented can design and continued to assert that its product was safe. *Id.* at 35.

"Section 349 of the GBL provides a cause of action for any person injured by '[d]eceptive acts or practices in the conduct of any business, trade or commerce or in the furnishing or any service.'" *Chufen Chen v. Dunkin' Brands, Inc.*, 954 F.3d 492, 500 (2d Cir. 2020) (quoting NY GBL § 349(a), (h)). "'Deceptive acts' are acts that are 'likely to mislead a reasonable consumer acting reasonably under the circumstances.'" *Id.* (quoting *Fink v. Time Warner Cable*, 714 F.3d 739, 741 (2d Cir. 2013)). "Where, as here, the allegations of materially misleading or deceptive conduct pertain to omissions, the defendant alone must possess the material information that is relevant to the consumer and fail to provide this information." *Morales v. Kimberly-Clark Corp.*, 2020 WL 2766050, at *5 (S.D.N.Y. May 27, 2020) (cleaned up). Accordingly, "[a] defendant's failure to reveal facts of which even it was unaware will not lead to liability under G.B.L. § 349." *Id.*; *see In re Sling Media Slingbox Advert. Litig.*, 202 F. Supp. 3d 352, 359 (S.D.N.Y. 2016); *Woods v. Maytag Co.*, 807 F. Supp. 2d 112, 129 (E.D.N.Y. 2011).

Plaintiff's claim under NY GBL § 349 fails as a matter of law because, as Defendants note, Plaintiff has failed to create a triable issue of fact as to Defendants' knowledge of the purported defect. For the reasons discussed, Plaintiff has failed to proffer sufficient evidence of the *existence* of a design defect in the PAM Original cans let alone Defendants' knowledge of such a defect. In addition, while Plaintiff has created a triable issue of fact as to the existence of an unspecified manufacturing defect that caused Plaintiff's injuries, that claim is premised on the fact that Plaintiff herself was unable to identify what that defect was. Plaintiff therefore has no

basis to claim that Defendants were aware of this unknown defect prior to Plaintiff sustaining her injuries.

Plaintiff's attempt to fill this gap through pointing to approximately twenty-six consumer complaints that Conagra received prior to mid-2018 related to PAM containers venting is unavailing. That Defendants received complaints or lawsuits regarding its product "does not, alone, give rise to an inference that Defendant failed to disclose material information." *Morales*, 2020 WL 2766050, at *6; *see Leonard v. Abbott Lab'ys, Inc.*, 2012 WL 764199, at *24 (E.D.N.Y. Mar. 5, 2012) ("[T]he mere existence of product complaints does not in and of itself prove that the product was unsafe."). This is particularly true, here, where the number of complaints over an approximately six-year period is relatively small and Defendants stated that of those complaints involving lawsuits, "there has never been a jury verdict against Conagra (or other defendant), there has never been any admission of liability of any kind or any finding of 'defect in any cooking spray product.'" Dkt. No. 106-9 at 4–8. Moreover, a review of the details of those complaints indicates that some appear to have been caused by risks that Defendants disclosed to consumers—specifically, not to overheat the can. *Id.* at 8–10 (*e.g.*, "dropped the can and it landed on a hot grill, bottom burst open," "[a] bottle of cooking spray was left on the stove and exploded"). Based on this evidence, a jury could not reasonably find for Plaintiff, particularly in the absence of any other evidence that the product was defective and that Defendants were aware of it. *See Liberty Lobby, Inc.*, 477 U.S. at 252 ("The mere existence of a scintilla of evidence in support of the plaintiff's position will be insufficient; there must be evidence on which the jury could reasonably find for the plaintiff.").

Moreover, to the extent that Conagra is asserting that Conagra's settlement of certain of these claims and its decision to discontinue its use of the vented can design in 2019 are

admissions of fault, such evidence is inadmissible under Federal Rules of Evidence 407 and 408. *See* Fed. R. Evid 407 ("When measures are taken that would have made an earlier injury or harm less likely to occur, evidence of the subsequent measures is not admissible to prove: negligence; culpable conduct; a defect in a product or its design; or a need for a warning or instruction."); *Koch Indus., Inc. v. Aktiengesellschaft*, 727 F. Supp. 2d 199, 224 (S.D.N.Y. 2010) ("Rule 408 prohibits admission of a settlement when offered to prove a defendant's liability."). This evidence thus cannot be used to support Plaintiff's claim under NY GBL § 349. Defendants are entitled to summary judgment on this claim.

E. Negligence and Implied Warranty Claims

"For a breach of implied warranty claim to survive a motion to dismiss under New York law, Plaintiff must allege the following: '(1) that the product was defectively designed or manufactured; (2) that the defect existed when the manufacturer delivered it to the purchaser or user; and (3) that the defect is the proximate cause of the accident.'" *Cowan*, 2017 WL 59080, at *5 (quoting *Simon v. Smith & Nephew*, Inc., 990 F. Supp. 2d 395, 407 (S.D.N.Y. 2013)). "Liability under strict products liability and implied warranty theory are 'essentially the same.'" *Cavanagh v. Ford Motor Co.*, 2014 WL 2048571, at *5 (E.D.N.Y. May 19, 2014) (quoting *Dalton v. Stedman Mach. Co.*, 2008 WL 351676, at *7 (N.D.N.Y. Feb. 7, 2008)). "Such a verdict may be sustainable solely on circumstantial evidence." *Bradley v. Earl B. Feiden, Inc.*, 864 N.E.2d 600, 604 (N.Y. 2007).

"Under New York law, the elements of negligence claims based on design defect [and] manufacturing defect . . . theories are the same as those under strict liability." *Cowan*, 2017 WL 59080, at *4 (alteration adopted) (quoting *Miccio v. Conagra Foods, Inc.*, 224 F. Supp. 3d 200, 208 (W.D.N.Y. 2016)). "Under New York law, to state a claim for manufacturing defect under theories of strict liability or negligence, the plaintiff must allege that (1) the product was

defective due to an error in the manufacturing process and (2) the defect was the proximate cause of plaintiff's injury." *Tears*, 344 F. Supp. 3d at 509 (citation omitted). A negligence claim of manufacturing defect may be established "through circumstantial evidence." *Gargano v. Rosenthal*, 473 N.Y.S.2d 225, 227 (2d Dep't 1984).

Defendants move to dismiss Plaintiff's negligence and implied warranty claims noting that they are "premised on the product liability theories addressed above and fail for the same reasons." Dkt. No. 93 at 34. Plaintiff responds that "material issues of fact remain on each of Plaintiff's product liability theories" and therefore "ConAgra is not entitled to summary judgment on her negligence or implied warranty claims." Dkt. No. 104 at 34. Because Plaintiff has raised a triable issue of fact as to the existence of an unspecified manufacturing defect, the Court declines to grant summary judgment in favor of Defendants on these claims on the basis of the arguments they assert.[12]

II. Daubert Motions

Defendants have moved to exclude the testimony of four of Plaintiff's experts, Dkt. Nos. 77, 80, 83, 86, and Plaintiff has moved to exclude the testimony of four of Defendants' experts. Dkt. No. 87. As discussed in Section I.A, the Court has already addressed and found certain testimony by Plaintiff's experts, Hendrickson and Eagar, inadmissible at trial under Federal Rule

[12] Because Defendants do not argue that these claims are duplicative of Plaintiff's manufacturing defect claim or duplicative of one another, the Court does not address whether they should be dismissed on that basis. *See Viania v. Zimmer, Inc.*, 2017 WL 5714725, at *7 (E.D.N.Y. Nov. 27, 2017) (stating that the case law supports that such claims are not duplicative, but not taking a definitive opinion on the issue); *Voss v. Black & Decker Mfg. Co.*, 450 N.E.2d 204, 207 (N.Y. 1983) ("In New York, a plaintiff injured by an allegedly defective product may seek recovery against the manufacturer on the basis of any one or more of four theories of liability. Depending on the factual context in which the claim arises, the injured plaintiff, and those asserting derivative claims, may state a cause of action in contract, express or implied, on the ground of negligence, or, as here, on the theory of strict products liability." (internal quotation marks and citation omitted)). !

of Evidence 702. In addition, because the Court granted summary judgment in Conagra's favor on Plaintiffs' claims related to the existence of a specific manufacturing or design defect, failure to warn, as well as Plaintiff's NY GBL § 349 claim, any expert testimony related solely to those claims is no longer relevant and thus is inadmissible under Rule 702. *See Daubert*, 509 U.S. at 588 (Under Rule 702, expert testimony must "assist the trier of fact to understand the evidence or to determine a fact in issue." (quoting Fed. R. Evid. 702)(a))); *Schmidt*, 2020 WL 7027445, at *16.

Accordingly, expert testimony related to the consumer warnings on the label of the Subject Can is no longer relevant and admissible under Rule 702. Such testimony has no bearing on whether Plaintiff was injured as a result of an unspecified manufacturing defect and thus will not "help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702(a). For this reason, Defendants' motions to exclude Hendrickson's and Kitzes's testimony as to the adequacy of the warnings as well as Plaintiff's motion to exclude Dorris's Dee's, and Shipley's testimony as to the adequacy of the warnings are granted in part.

The parties' remaining requests to preclude expert testimony are denied without prejudice to renewal. The parties briefed those motions addressing the admissibility of that testimony on the assumption that all of Plaintiffs' then-existent causes of action would survive, including its claims for specific manufacturing and design defect as well as its claim under NY GBL § 349. This opinion, however, has substantially narrowed which of those causes of action are triable and what facts are still in dispute. Accordingly, the parties' arguments as to the relevancy of certain of this testimony and its admissibility under Rule 702 are likely to change substantially. To provide the parties with the opportunity to revise their arguments in light of this Opinion, the

Court denies the parties' remaining requests to exclude expert testimony without prejudice to renewal.

CONCLUSION

Defendants' motion for summary judgment is GRANTED IN PART and DENIED IN PART. Defendants' motions to exclude the testimony of Hendrickson, Eagar, and Kitzes are GRANTED IN PART AND DENIED IN PART without prejudice. Defendants' motion to exclude the testimony of Cahanin is DENIED without prejudice. Plaintiff's motion to exclude is GRANTED IN PART AND DENIED IN PART without prejudice.

The Clerk of Court is respectfully directed to close Dkt. Nos. 77, 80, 83, 86, 87, 92

SO ORDERED.

Dated: September 28, 2022
New York, New York

LEWIS J. LIMAN
United States District Judge