

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN**

TRACI L. LEMMERMANN,

Plaintiff,

v.

BLUE CROSS BLUE SHIELD OF WISCONSIN

Involuntary Plaintiff,

Case No. 08-CV-0779

v.

WAL-MART STORES, INC.,
ARCH CHEMICALS, INC.,
ABC INSURANCE COMPANY, and
DEF INSURANCE COMPANY,

Defendants.

ORDER

In the next few months, summer will slowly approach in Wisconsin and, with it, prime swimming season. Swimming is one of the most popular activities in the Badger State with its countless places for recreational swimming, including Lake Michigan, Wisconsin's 15,000 inland lakes, the state's 44,000 miles of rivers, and even artificial public and private pools. However, for those who opt for the latter location in which to dip their toes in the hot summer months, besides a rainy or unseasonably cold day, one of the most formidable enemies of a successful swim is green algae, a greenish growth that can appear on the floors and walls of a swimming pool or can suspend on the top of the pool, making the water unsuitable for swimming. To ensure a proliferation of algae does not further the "summertime

blues,” swimming pool owners use “shock,” a chemical that is a granular form of highly concentrated chlorine¹ that elevates the chlorine level in pool water, making the water unlivable for algae, helping combat the green pest.

Like other swimming pool owners, the plaintiff, Traci L. Lemmermann (“Lemmermann”), a resident of Belgium, Wisconsin, was faced with a pool filled with algae and opted to use “shock” to treat her pool. Lemmermann claims that on June 11, 2005, upon mixing “HTH Sock It Vinyl Pool Shock” (“*Sock It*”), a “shock” produced by one of the defendants, Arch Chemicals Inc. (“Arch Chemicals”), with a gallon of water, the solution exploded, causing her respiratory injuries. The defendants dispute that the product exploded upon contact with water and contend that, even assuming the product did explode when exposed to water, the explosion did not cause Mrs. Lemmermann’s injuries. Ultimately, the defendants argue that the plaintiff is unable to proffer “competent, admissible expert opinion evidence” to support her claim (Def’s Mot. ¶ 5), and, accordingly, the court should award summary judgment pursuant to Fed. R. Civ. P. 56 in favor of the defendants on all counts. (Docket #16). With the benefit of the parties’ briefs on the motion for summary judgment and the various motions to exclude expert testimony (Docket #20, #22, #35), the court is prepared to address the motions. The court will begin by briefly discussing the factual issues animating the present dispute, starting with

¹ Or similar substance.

a discussion of Mrs. Lemmermann's health prior to incident that occurred on June 11, 2005.

UNDISPUTED FACTS

A. Lemmermann's Health Record Prior to the June 11, 2005 Incident

In the years prior to the June 11, 2005 incident, the undisputed evidence indicates that the plaintiff suffered from asthma and other problems with her breathing. Mrs. Lemmermann's primary care physician, Richard Bunting, M.D. ("Bunting"), who has cared for the plaintiff since June of 1996, repeatedly treated the plaintiff for her affliction, advising her to use steroid inhalers to treat her medical condition.² On March 25, 1997, Dr. Bunting ultimately diagnosed Lemmermann as suffering from "extrinsic asthma," a "severe" condition requiring "maintenance therapy." (DPFF ¶ 48). As a result, in the years following Dr. Bunting's diagnosis, Lemmermann's difficulties in breathing, including mild wheezing, a symptom of asthma, was controlled by a series of treatments, such as a Maxair inhaler and Albuterol. (DPFF ¶¶ 50-52).

Mrs. Lemmermann has also battled allergies, seeing allergist Lauren Charous M.D. ("Charous") in October of 1998. The plaintiff's allergies included positive allergic reactions to "cats, dogs, and a variety of pollens." (DPFF ¶ 54). Dr. Charous provided Lemmermann with a trial of "Singulair," another asthma medicine, although

² Dr. Bunting prescribed Beclovent for Ms. Lemmermann, a "maintenance therapy" that is used to "prevent flare ups of asthma." (DPFF ¶¶ 46-47). The plaintiff has also used Ventolin, a "bronchodialator used in the treatment of asthma." (DPFF ¶ 43, ¶ 45).

Dr. Bunting does not recall Mrs. Lemmermann undergoing such a trial. In 2002, Dr. Charous formally prescribed Singulair for the plaintiff and also provided Mrs. Lemmermann with Nasacor AQ. Nothing in the record indicates that Lemmermann was treated for asthma in any significant way after 2002, but Lemmermann did report that she was using Albuterol to treat her asthma to hospital officials on June 11, 2005.

B. The June 11, 2005 Incident

In the summer of 2004, the plaintiff purchased a one pound bag of *Sock It*, a pool treatment product, from a Wal-Mart Stores, Inc. (“Wal-Mart”) retail store in Saukville, Wisconsin, in order to treat algae in a pool and keep it clean. The product itself includes a label indicating the active ingredients within the product are ninety-nine percent “Sodium Dichloro-s-Triazinetrione Hydrated” (“sodium dichlor” or “dichlor”)³ and one percent “inert ingredients.”⁴ The label contains a series of warnings, such as “Keep Out of Reach of Children” and “First Aid” if the product is swallowed, exposed to the skin or eyes, or inhaled. Moreover, the label provides extensive “directions for use,” noting in bold lettering to “read all [of the precautions] before use.” In relevant part, the label warns to “use [the product with] only clean, dry utensils” and to “not use this product in any chlorinating device which has been used with any inorganic or unstabilized chlorinating compounds (like calcium

³ The parties refer to “dichlor” with the chemical name “sodium dichloroisocyanurate dihydrate” (NaDCC), but the court merely notes the name referenced on the *Sock It* label.

⁴ The plaintiff disputes that the product actually contained dichlor, (Pl’s Resp. to DPF ¶ 9), but has no evidence to support its assertion.

hypochlorite)” because “such use may cause fire or explosion.” This warning is similar to the warning provided on the “Material Safety Data Sheet” for *Shock It*, which states “if this material becomes damp/wet or contaminated in a container the formation of nitrogen trichloride gas [“trichlor”] may occur and an explosive condition may exist.” The label provides no warning against pre-mixing uncontaminated *Shock It* in a small volume of water.

On June 11, 2005, taking an action she had done on “multiple occasions” “without incident,” (PPFF ¶ 127), Lemmermann mixed the contents of the one pound of product into a plastic pitcher containing water, in order to better dissolve the product.⁵ The solution of the product and water “suddenly exploded” (PPFF ¶ 129, DPFF ¶ 8), with fumes and foam spraying from the container on to the plaintiff. The explosion was quite loud, with one side stating the sound was akin to “30.06 deer rifle” shot (DPFF ¶ 8), while the other side claims that the sound was “so loud” that Lemmermann’s son heard the explosion from outside the house. (PPFF ¶ 130). Lemmermann’s husband called 911, and the plaintiff, after rinsing off the foam and spray from the explosion, was transported to a local hospital.

⁵ Lemmermann claims she did this because, upon calling Arch Chemicals’ customer service number to inquire as to how she could ensure that the *Sock It* product would fully dissolve when added to water, Arch advised the plaintiff to pre-mix the product with water in a container before dumping the mixture in the pool. However, the defendants dispute that Lemmermann made such a phone call or that such advice was ever provided to the plaintiff, as there is no record of Arch Chemical receiving a phone call from Lemmermann. Having said that, the defendants concede that Arch Chemicals’ “Help Line” instructors were encouraged to tell customers to premix the *Sock It* product “using a clean bucket and utensils for mixing.” (Pierrottie Dep. 49:23-50:24). The court will proceed noting broadly that neither side disputes the fact that Arch Chemicals never warned the plaintiff that mixing water and *Sock It* in an uncontaminated bucket to form a highly concentrated solution of the product could create an explosion.

The emergency department report for Mrs. Lemmermann indicates that she was admitted because of “chemical chlorine” exposure. (Bunting Dep., 79:21-22). It is undisputed that Lemmermann suffered “superficial eye injuries” and had minor symptoms of respiratory irritation immediately after the incident (PPFF ¶ 175), but whether Mrs. Lemmermann suffered more severe injuries remains in dispute. The plaintiff asserts that she was having difficulties breathing immediately after the explosion, was nauseous, and was suffering from headaches. However, the medical report for Mrs. Lemmermann’s visit to the emergency room states that the plaintiff denied any shortness of breath, fever, chills, nausea, vomiting, or chest pain. Moreover, when examined, Lemmermann’s lungs were “clear and equal, without rales, wheeze or rhonchi.” (DPFF ¶ 65). Dr. Bunting, who examined Mrs. Lemmermann on that day, concluded that Lemmermann’s complaints regarding shortness of breath and a headache were due to an “acute anxiety reaction and hyperventilation,” as opposed to “exposure to chemicals at the time” of the incident, and, accordingly, prescribed an anti-anxiety medicine for his patient. (DPFF ¶¶ 68-69). Lemmermann ultimately stayed at the hospital for two days following the incident. In several follow-up visits, after the June 11, 2005 incident, Dr. Bunting examined the plaintiff, finding the plaintiff’s lungs to be “clear.” (DPFF ¶ 70, ¶ 73, ¶ 76). Dr. Bunting concluded that Lemmermann’s complaints were caused by a “significant anxiety component,” as opposed to chemical exposure. (DPFF ¶ 72). Accordingly, Lemmermann’s doctor prescribed Nortriptyline, an antidepressant.

Finding nothing abnormal with Lemmermann's breathing, on July 12, 2005, Dr. Bunting referred the plaintiff to Dr. Rula al-Saghir ("al-Saghir"), a pulmonologist, telling Lemmermann to see Dr. al-Saghir "if she still thinks [her breathing to be] a problem." (DPFF ¶ 77).

On June 5, 2008, Lemmermann filed a suit in an Ozaukee County circuit court against defendants Wal-mart and Arch Chemicals, alleging common law negligence and strict liability claims stemming from the plaintiff making a highly concentrated solution of *Sock It* and water. A little over three months later, the defendants removed the case to this court. (Docket #1). During discovery, Arch Chemicals disclosed an internal incident report dated August 13, 2003, which indicated that a customer called to complain that his wife had "added some water to a bucket filled with" *Sock It*, causing the water to fizz. The report further states that the customer's wife and child ran out of the room, when the "bucket exploded."

After appropriate discovery occurred, the defendants collectively filed for summary judgment pursuant to Fed. R. Civ. P. 56. (Docket #16). Propelling the motion for summary judgment were separate motions to exclude the expert testimony of two of the plaintiff's designated experts: (1) Mr. Michael D. Schuck, P.E. ("Schuck") (Docket #20); and (2) Dr. al-Saghir (Docket #22). Accordingly, before the court can determine, based on the evidence provided by the plaintiff, whether Lemmermann can survive summary judgment, the court must first determine what evidence the plaintiff may proffer to challenge the motion for

summary judgment. As such, this order will first address the defendants' motions to exclude the expert evidence. The court notes that the plaintiff has filed her own motion to exclude the testimony of one of the defendants' expert, Ms. Sonia Oberson ("Oberson"). The court will reserve judgment on this latter motion until the court resolves the summary judgment issue.⁶

DISCUSSION

I. Motions to Exclude Expert Evidence

Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), govern the admission of expert testimony. Rule 702 states:

"If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case."

Accordingly, a district court is obliged to function as a "gatekeeper" regarding expert testimony, which requires making sure the proposed testimony is both relevant and reliable. *Daubert*, 509 U.S. at 589. In order to make such an evaluation, the court must analyze the proposed testimony using a three-step analysis. *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904 (7th Cir. 2007).

⁶ Accordingly, the court does not rely on Ms. Oberson's testimony in resolving the motions to exclude the plaintiff's experts.

First, “the witness must be qualified ‘as an expert by knowledge, skill experience, training, or education.’” *Id.* An expert need not have particular academic credentials to be “qualified,” but rather “anyone with relevant expertise enabling him [or her] to offer responsible opinion testimony helpful to judge or jury may qualify as an expert witness.” *Tuf Racing Prods., Inc. v. American Suzuki Motor Corp.*, 223 F.3d 585, 591 (7th Cir. 2000). Ultimately, “whether a witness is qualified as an expert can only be determined by comparing the area in which the witness has superior knowledge, skill, experience, or education with the subject matter of the witness’s testimony.” *Carroll v. Otis Elevator Co.*, 896 F.2d. 210, 212 (7th Cir. 1990). In other words, the focus is not on whether the “expert is qualified in general, but whether his or her ‘qualifications provide a foundation for [him or her] to answer a specific question.’” *Gayton v. McCoy*, 593 F.3d 610, 617 (7th Cir. 2010) (internal citations omitted).

However, even if the court finds that a witness is a “supremely qualified expert,” that witness “cannot waltz into the courtroom and render opinions unless those opinions are based upon some recognized scientific method and are reliable . . .” *Clark v. Takata Corp.*, 192 F.3d 750, 759 n.5 (7th Cir. 1999). Accordingly, at the second step of its analysis of expert testimony, the court must determine that an “expert’s reasoning or methodologies underlying the testimony” are “scientifically reliable.” *Ervin*, 492 F.3d at 904. *Daubert* provided a non-exhaustive list of “guideposts” for the court to consult in assessing the reliability of expert testimony:

(1) whether the scientific theory can be or has been tested; (2) whether the theory has been subjected to peer review and publication; (3) the theory's known or potential error rate when applied; and (4) whether the theory has been generally accepted in the relevant scientific, technical, or professional community.⁷ *Daubert*, 509 U.S. at 593-94. “[T]he *Daubert* framework when assessing the reliability of an expert’s testimony is a flexible one that must be adapted to the particular circumstances of the case and the type of testimony being proffered.” See *Mihailovich v. Laatsch*, 359 F.3d 892, 919 (7th Cir. 2004); see also *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999) (holding that, in applying the *Daubert* framework, a court must “account for the various types of potentially appropriate expert testimony.”) Ultimately, the object of the court’s Rule 702 reliability inquiry is to ensure that the opinions expressed by testifying experts “adhere to the same standards of intellectual rigor that are demanded in their professional work.” *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 318 (7th Cir. 1996).

⁷ Other factors may apply. The Seventh Circuit, parroting the Advisory Committee Notes to Rule 702, has suggested other

benchmarks for gauging expert reliability, including: (5) whether “maintenance standards and controls” exist; (6) whether the testimony relates to “matters growing naturally and directly out of research they have conducted independent of the litigation,” or developed “expressly for purposes of testifying”; (7) “whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion”; (8) “whether the expert has adequately accounted for obvious alternative explanations”; (9) “whether the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting”; and (10) “whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give.”

Fuesting v. Zimmer, Inc. (Fuesting I), 421 F.3d 528, 534-35 (7th Cir. 2005), *vacated in part on other grounds*, 448 F.3d 936 (7th Cir. 2006).

Third, a court must confirm that an expert's testimony is relevant; that is, the testimony must "assist the trier of fact to understand the evidence or to determine a fact in issue." *Ervin*, 492 F.3d at 904. Relevant evidence is evidence that 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 than it would be without the evidence." *Daubert*, 509 U.S. at 587 (citing Fed. R. Evid. 401). The proponent of the expert's testimony bears the burden of proof with respect to whether the admissibility requirements are met. See *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 704 (7th Cir. 2009). With these legal principles in mind, the court proceeds to examine the proposed testimony of the two witness that are the subject of the *Daubert* motions.

A. Michael D. Schuck

The plaintiff wishes to introduce Michael D. Schuck to testify with respect to "Arch's negligence in failing to warn . . . Lemmermann about the propensity for *Sock It* to cause a hazardous explosion when mixed in a small volume of water." (Pl's Resp. Br. 5). Mr. Schuck is ultimately testifying regarding two distinct claims: (1) *Sock It* by itself when mixed in a small volume of water is volatile enough to create a major explosion; and (2) Arch Chemicals should have provided a warning about the propensity of *Sock It* to cause such an explosion.

1. Mr. Schuck's Qualifications

First, the court examines whether Mr. Schuck is qualified to testify on *each* of the two issues that his testimony concerns. See *Gayton*, 593 F.3d at 617 (“[W]e must look at each of the conclusions [the expert] draws individually to see if he [or she] has the adequate education, skill, and training to reach them.”).

a. Qualification Regarding *Sock It's* Volatility

The court initially examines the qualifications of Mr. Schuck to determine whether he has “superior knowledge, skill, experience or education” in an area that matches the issue of whether mixing uncontaminated dichlor with water will cause an explosion, “the subject matter of the witness’s testimony.” *Carroll*, 896 F.2d at 212. Mr. Schuck’s academic record indicates that he holds a Bachelor of Science in Chemical Engineering from Wayne State University and a Master of Science in Environmental Engineering from the Milwaukee School of Engineering. The witness’ primary qualification to opine on whether a chemical is volatile stems from his most recent work experience. From 1991 until 2006, Mr. Schuck worked for the Aldrich Chemical Company (“Aldrich”), a life science and high technology company whose products are used in scientific research institutions. Schuck served as an environmental engineer at Aldrich, being “charged with the duty of evaluating the hazards of chemicals in assisting the design of 25-30 different Material Safety Data Sheets for products containing various chemicals.” (PPFF ¶ 160). Additionally, the witness’ expert report indicates that he has extensive experience with providing

“regulatory compliance, environmental health and safety . . . compliance, environmental program management and engineering services for industrial clients,” which includes tracking and compiling information regarding the use, storage and disposal of chemicals for particular environmental management plans. Mr. Schuck has never worked as a toxicologist, is not certified or licensed as a toxicologist, but does claim to have expertise in the area of toxicology because he has “some friends who are industrial hygienists” who he has “asked for their opinion” on the subject with regard to his teaching a “risk assessment class” at the Milwaukee School of Engineering. (Schuck Dep. 37:13-25). Mr. Schuck conceded in sworn testimony that prior to his engagement in this case that he had no experience or knowledge related to dichlor and had no specific experience dealing with pool chemicals.⁸ (Schuck Dep. 15-16). Ultimately, Mr. Schuck’s best qualification for being able to testify regarding the reactive nature of dichlor with water stems from his familiarity with the “science of chemistry,” provided by his education in chemical engineering and his years of experience in environmental management.

Here, the court concludes that Mr. Schuck is qualified to relate his opinion on the volatility of *Shock It* when solely mixed with water. The witness’s years of experience in studying and evaluating the hazards posed by various chemicals and monitoring the effects a given chemical will have on its environment allow the court to conclude that Mr. Schuck is well-versed in the general area of chemistry. The

⁸ Mr. Schuck claims that he “may” have heard of dichlor prior to being engaged in the present lawsuit because it is a “common chemical.” (Schuck Dep. 16:21).

defendants' central objection to the witness's qualifications is that the witness lacks knowledge about dichlor. (Def's Br. 7). However, nothing in Rule 702 or in the jurisprudence interpreting the rule indicates that an expert must have specific knowledge about the precise object of the litigation. See *Baumholser v. Amax Coal Co.*, 630 F.2d 550, 551 (7th Cir. 1980) ("The fact that [the expert] had little actual experience in the study of blasts from coal mining operations[, the specific issue in the litigation,] did not disqualify him from expressing his opinion, which was based on general geological principles."); see also *Tormenia v. First Investors Realty Co.*, 251 F.3d 128, 135 (3d Cir. 2000) ("Rule 702 does not require that experts have personal experience with the object of the litigation in which they testify, nor does it require that experts eschew reliance on a plaintiff's account of factual events that the experts themselves did not observe.") In fact, the essence of expert testimony is calling a person to testify who has a knowledge base superior to a lay person in a "general theory or technique" and having that person "apply . . . the theory or technique to the specific facts of the case." Kenneth S. Broun, *McCormick on Evidence* § 13 (6th ed. 2006) ("[T]he expert's testimony is a syllogism: the major premise is the validity of the general theory or technique, the minor premise is the case specific data, and the application of major to minor yields a conclusion relevant to the merits of the case.") Such is what will occur with Mr. Schuck opining on the subject of *Shock It's* volatility when mixed with water.

The cases the defendants cite offer little support on the question of whether Mr. Schuck is *qualified* to testify about chemical reactions involving dichlor. *Kirstein v. Parks Corp.*, 159 F.3d 1065 (7th Cir. 1998), is not a case about an expert's qualifications to testify, but is rather concerned with the "reliability" prong of the *Daubert* inquiry. *Id.* at 1067 ("It is true that Dr. Nelson has impressive credentials . . . [b]ut the fact is that he did no testing on these products, either alone or in combination.") Moreover, the cases of *Wintz v. Northrop Corp.*, 110 F.3d 508 (7th Cir. 1997), and *Jones v. Lincoln Electric Co.*, 188 F.3d 709 (7th Cir. 1999), are inapposite on the question of expert qualifications. In both cases, the court pondered motions to exclude witnesses who were to testify regarding the *effect* a particular substance had on human health. In both cases, the experts had a significant knowledge base regarding the particular substance in question.⁹ However, in both cases, the Seventh Circuit found that the witness was not competent to testify on the specific "task at hand," namely testifying as to the *effect* that the substance in question had on the human body, as neither witness was a *medical* doctor or had relevant *medical* expertise or knowledge. See *Wintz*, 110 F.3d at 514 ("[N]otwithstanding his general qualifications as a toxicologist, [the witness] did not possess sufficient expertise or knowledge as to the relevant medical question dealing with the proximate cause of [the plaintiff's] injuries to assist the trier

⁹ In *Wintz*, the witness, a toxicologist, was called to testify as to the effect on a young child of in utero exposure to bromide. 110 F.3d at 512. In *Jones*, the witness, a metallurgist, was the plaintiff's expert witness as to the effect of manganese on the human body. 188 F.3d at 724.

of fact in understanding the case”); see also *Jones*, 188 F.3d at 724 (“While [the expert] undoubtedly is a very intelligent individual, he is not a medical doctor nor is there any indication in the record that suggest that he has any experience in assessing the toxicology or other health effects of manganese on the body . . .”). In this case, Mr. Schuck is not testifying as to the effect that dichlor had on Mrs. Lemmermann; rather Mr. Schuck is merely testifying as to what occurs when uncontaminated dichlor is mixed with water, something well within his expertise, given his knowledge of and experience in the field of chemistry.¹⁰ While Mr. Schuck may not be the most qualified person within the field of chemistry to testify on the issue before the court, such a standard is not required by the Federal Rules of Evidence, and any disparities with Mr. Schuck’s qualifications can be the subject of cross-examination, if Mr. Schuck’s testimony is otherwise admissible. See G. Joseph & S. Saltzburg, *Evidence in America* § 51.3 (Courts have made it clear that “trial judges are not to demand that the proffered expert possess the highest possible credentials or skills, or be the most qualified of all conceivable experts.”).

b. Qualifications Regarding the Necessity of Including a Warning

The plaintiff does not wish for Mr. Schuck to merely opine on the chemical volatility of *Sock It* when mixed with water, however. In addition, the plaintiff proffers

¹⁰ The defendants cite to *Jones*, arguing that the witness must have “extensive hands-on experience over a meaningful period of time during which a person develops a working expertise in a certain area.” 188 F.3d at 724. However, the quote from *Jones* merely indicates that an expert witness has to have knowledge in a “certain area,” and the quote does not provide any basis to conclude that an expert has to have specific knowledge about the precise object of the litigation.

the witness's testimony to provide evidence that Arch Chemicals was negligent in "failing to warn Mrs. Lemmermann about the propensity of *Sock It* to cause a hazardous explosion when mixed in a small volume of water." (Pl's Resp. Br. 5). Here, the court concludes that Mr. Schuck is not qualified to testify as to whether Arch Chemicals was negligent in failing to warn the plaintiff regarding the explosive nature of the product in question, as he is not an expert in the field of warnings. While Mr. Schuck's education and job experience reflects considerable expertise in environmental engineering and superior knowledge of the field of chemistry, it shows no similar expertise in the area of warnings. *See McCulloch v. H.B. Fuller Co.*, 981 F.2d 656, 657 (2d Cir. 1992) ("Woolley's training as an electrical and industrial engineer, along with his experience in the safety field, might qualify him to testify as to the need for a ventilation system, but that was not an issue in dispute. The adequacy of the warning labels was at issue, and Woolley is not an expert in that field because he lacks training or experience in . . . the design of warning labels."); *see also Early v. Toyota Motor Corp.*, 277 F. App'x 581, 585-86 (6th Cir. 2008) ("Concerning warnings, the district court found that Nogan had not written or reviewed any owner's or repair manuals for any product, had never created a maintenance schedule for an NBR seal, and made no assertion that he was an expert on warnings. For these reasons, the district court was understandably convinced that nothing in Nogan's educational or professional background qualifie[d] him as an expert regarding either design defects or warnings.").

Mr. Schuck's education and past job experience indicate he lacks an expertise in warnings. The best experience the witness has had in the area of warnings is in his work at Aldrich in designing Material Safety Data Sheets for the chemicals produced by that company. However, the majority of the product labels Schuck crafted were not designed for use by the general consuming public, but were rather intended for use at research institutions.¹¹ Moreover, the witness concedes that he has "very little" knowledge or experience regarding regulations related to pool chemicals. (Schuck Dep. 15). Additionally, Mr. Schuck claims to be familiar with standards of the American National Standards Institute ("ANSI"), the central organization that develops and accredits industry standards for various products and services, but was completely unfamiliar with the organization's standards relating to product safety and warnings information when asked about them in a sworn deposition. (Schuck Dep. 47). Mr. Schuck concedes that he is not an expert in the field of human factors engineering or analysis and has no formal training in consumer product labeling. (Schuck Dep. 48). Ultimately, Schuck's background shows next to no signs of expertise in consumer protection or product liability issues, nor does it establish an expertise in a manufacturer's responsibilities to the end users of their products. As a result, the court can only conclude with respect to the issue of failure to warn that the witness is only testifying on the basis of lay opinion,

¹¹In his deposition, Mr. Schuck states that most of the "products that we supplied at Aldrich would have gone to . . . universities, to people who were . . . engaged in research . . ." (Schuck Dep. 49:15-21). Moreover, none of the labels that Mr. Schuck designed were for pool sanitizer products, let alone dichlor. Most importantly, the plaintiff has not provided any evidence that the witness has ever created a label for use by the general consuming public.

and his testimony is accordingly inadmissible. See *United States v. Hall*, 93 F.3d 1337, 1343 (7th Cir. 1996) (“Unless the expertise adds something, the expert at best is offering a gratuitous opinion, and at worst is exerting undue influence on the jury that would be subject to control under Rule 403.”). However, the defendants have presented no case law that “failure to warn” claims require expert testimony, as the issue of Arch Chemicals’ negligence may well be in the purview of the jury. Accordingly, the court merely finds that Mr. Schuck is qualified to testify on the question of whether mixing uncontaminated dichlor with water could cause an explosion and is not qualified to testify on whether a warning would have prevented the incident or the adequacy of the warnings that were provided to Mrs. Lemmermann.

2. Reliability of Mr. Schuck’s Methodology

“Even if an expert is qualified,” a court should not allow an expert to offer an opinion that does not “rely on proper methodologies” and is “therefore speculative.” *Weir v. Crown Equip. Corp.*, 217 F.3d 453, 464 (7th Cir. 2000). Accordingly, the court must examine the methodologies that the instant witness used in arriving at the conclusion that mixing uncontaminated *Sock It* in a small volume of water would create a hazardous situation. In making such an examination, the court keeps in mind the list of relevant factors provided by the *Daubert* case and its progeny discussed earlier in the order in evaluating the reliability of an expert’s methods.

Here, the court finds that Mr. Schuck's methodology for determining that *Sock It* has a propensity to cause a hazardous explosion when mixed with a small amount of water is not scientifically reliable, and, accordingly, the entirety of his testimony is excludable under *Daubert*. Indeed, referring to the means by which the witness reached his conclusion as a "methodology" may be generous. Mr. Schuck concluded that dichlor mixed with water was dangerous based on his *reading* of: (1) the Material Safety Data Sheet for *Sock It*, which stated that if the material became "damp/wet or contaminated" an "explosive condition may exist"; (2) the *Sock It* container label, which called for mixing the product into 8,000 gallons of water and dissolving the product using a brush; (3) the 2003 incident report; and (4) a data sheet that explained that dichlor "may vigorously react with water releasing chlorine gas." In essence, Mr. Schuck's "methodology" involved reading several labels and data sheets regarding dichlor and, at best, parroting the conclusions of the authors of those data sheets. Surmising that a chemical reaction will occur because someone else has concluded that a chemical reaction will occur is utterly circular in its logic and is the epitome of an unreliable methodology.

Ultimately, Mr. Schuck has provided to the court what any other person reading the data sheets regarding dichlor could have concluded: that dichlor when mixed with water *may* cause a reaction. The court is left to speculate whether mixing *only* dichlor and water, as opposed to dichlor, water, and a third substance, will cause a violent reaction, as the witness has only given the court his ultimate

conclusion only supported by other ultimate conclusions. The Seventh Circuit has made clear that when an expert offers the court only a “bottom line,” and no means by which to adjudge its validity as an opinion in contrast to a differing opinion, the expert has offered “nothing of value to the judicial process.” *McMahon v. Bunn-O-Matic Corp.*, 150 F.3d 651 at 658 (7th Cir. 1998). (“No engineer would put such an unsupported assertion in a scholarly article... Why then should courts pay it any heed?”).

Most troubling for the court is not so much what Mr. Schuck used to conclude that dichlor was volatile when mixed with a small amount of water; rather, what troubles the court is what the witness did *not* do in providing his expert opinion. Mr. Schuck did absolutely no testing on dichlor and what occurs when the substance is mixed with water. Moreover, the expert did not provide the court with any studies which employed such testing, nor can the expert cite to any literature, document, journal article, textbook, or any other study that indicates that mixing dichlor with

water can produce a violent reaction.¹² (DPFF ¶¶ 17-18, 34). It is “elementary” that Mr. Schuck’s theory should have been submitted to testing, whether by him or by others in a study, as the essence of Lemmermann’s claim depends on what results from the combination of dichlor and water. *Kirstein*, 159 F.3d at 1069. Moreover, Schuck’s conclusions fail to satisfy other specific factors delineated in *Daubert* and the comments to the Federal Rules of Evidence, as Mr. Schuck’s theory has not been subject to peer review, there is no indication that the witness’ conclusions are generally accepted in the scientific community, and Mr. Schuck’s conclusions do not even attempt to grapple with the most obvious alternative explanation for how the explosion occurred – namely, that a third substance contaminated Mrs. Lemmermann’s dichlor and water mixture. The court must exclude Mr. Schuck’s testimony, as an expert’s ultimate opinion “must be grounded in the scientific process and may not be merely . . . unsupported conjecture.” *Lewis v. CITGO*

¹² Defendants, in support of their proposed findings of fact numbers 17 and 18 cite to pages 62-63 of Mr. Schuck’s deposition testimony. Plaintiff, in opposing defendants’ proposed findings of fact numbers 17 and 18 cite to pages 61-62 of the expert’s deposition testimony. However, plaintiff, unlike defendants, does not provide the excerpt of the pages of Schuck’s deposition testimony to which it cites. This makes it impossible for the court to determine whether there is an actual dispute as to the proposed fact. Given that it is the plaintiff’s burden to show that the witness’ testimony should be included, the court only looks to page 62 of the testimony to conclude there is no dispute as to the fact that Mr. Schuck has never read a report stating that mixing dichlor with a small amount of water will cause an explosion. More broadly, this occurrence highlights the utter inefficiency of the protocol followed by most attorneys when filing for summary judgment. Perhaps filing numerous excerpts from a single person’s deposition testimony made sense when courts relied on paper documents. However, the existence of electronic filing renders such practice archaic. If the parties are going to be citing to various portions of a witness’ deposition, then instead of requiring the court to engage in an archeological dig to find whichever excerpt it needs at any given time, and instead of risking not providing the court with the relevant excerpt, the parties should have simply filed the entire deposition in one place and then both cite to that one filing whenever referring to the witness’ deposition. The simple fact is that while the current CM/ECF system holds the promise of greater efficiency for the court, much of that promise is mooted by attorneys’ antiquated practices. Going forward in future cases before this court the parties’ attorneys should be much more mindful of how to use the system so as to reduce clutter, promote clarity, and ensure efficiency. See 07-CV-926, Docket #215, Scheduling Order dated 2/2/2010 (proffering suggested guidelines for the filing of materials in support of motions for summary judgment).

Petroleum Corp., 561 F.3d 698, 705 (7th Cir. 2009). Moreover, the infirmities with Mr. Schuck's testimony do not go to the weight of the evidence, but rather to the overall reliability of his conclusions, and, the court, serving as a gatekeeper against unreliable expert testimony, must exclude Mr. Schuck's testimony.¹³ The court proceeds to examine the admissibility of Dr. al-Saghir's testimony.

B. Dr. Rula al-Saghir

Mrs. Lemmermann has designated Dr. al-Saghir, a pulmonologist to whom the plaintiff was referred to by her primary care physician, as the only expert testifying on the medical causation issue. Dr. al-Saghir intends to testify that the plaintiff either: (1) became afflicted with Reactive Airways Dysfunction Syndrome ("RADS"), "the development of a persistent asthma-like condition with airway hyperresponsiveness developing in a previously healthy asymptomatic individual within 24 hours of a single exposure to concentrated respiratory irritants," (DPFF ¶ 97); or (2) suffered an "exacerbation of her asthma" (Pl.'s Resp. Br. 5) as a result of exposure to fumes produced when Lemmermann mixed *Sock It* with water. The defendants do not contest Dr. al-Saghir's qualifications to testify on the medical causation issue: the witness is a "licensed physician and surgeon specializing in pulmonary medicine and critical care medicine," certified by several medical boards. (PPFF ¶¶ 143-145). Instead, the defendants challenge the methodology used by Dr. al-Saghir to arrive at her diagnosis of: (1) RADS; or, in the alternative, (2)

¹³ The court will resolve the question of whether Lemmermann has enough evidence beyond the testimony of Mr. Schuck on the liability issue to survive summary judgment later in this order.

exacerbation of preexisting asthma. As a result, the court examines the means by which Dr. al-Saghir reached her conclusions.

After Dr. Bunting referred the plaintiff to the witness, Dr. al-Saghir first saw Mrs. Lemmermann on July 20, 2005. Before meeting with the plaintiff, the witness reviewed some of Mrs. Lemmermann's most recent records, which indicated that the plaintiff's airway was "moderate[ly] obstruct[ed]" and that the plaintiff was being treated with inhaled bronchodilators since the incident. (al-Saghir Dep. Ex. 16). Dr. al-Saghir did not have any conversations with the plaintiff's primary care physician, however. Notably, the witness did not review Mrs. Lemmermann's "older records" regarding her long history of respiratory problems before the examination. (al-Saghir Dep. 73). During her appointment with Dr. al-Saghir, Mrs. Lemmermann denied that she had any previous respiratory problems and did not disclose that she had used bronchodilators prior to the incident on June 11, 2005. In short, the witness was completely unaware of the plaintiff's prior history of asthma complaints prior to reviewing Mrs. Lemmermann's medical records in anticipation of a 2009 deposition. (DPFF ¶ 90). Moreover, during the examination, Dr. al-Saghir did not observe Mrs. Lemmermann wheeze or suffer from shortness of breath, despite the plaintiff's alleged complaints. In addition, the witness "saw no evidence of obstruction in any of Lemmermann's pulmonary function tests ordered after beginning her treatment in July 2005." (DPFF ¶ 94). Dr. al-Saghir did not order a "methacholine challenge test," a medical test used to assist in the diagnosis of

asthma, on Mrs. Lemmermann in 2005.¹⁴ Nonetheless, Dr. al-Saghir concluded in a report dated February 6, 2009, that the plaintiff's "history and findings on examination are consistent with a diagnosis of" RADS, as "symptoms [of RADS] start after an exposure to a high concentration of respiratory irritants." (al-Saghir Dep. Ex. 16). The doctor did not say anything in her February 2009 report that concluded that Mrs. Lemmermann was suffering from an exacerbation of her preexisting asthma as a result of the June 11, 2005 incident and appears to have made such a conclusion only after her deposition was taken.¹⁵

Moreover, Dr. al-Saghir appears confused about the nature of the June 11, 2005 incident. While the witness understood that the plaintiff was injured when she tried to dilute sodium dichlor with water, during her deposition Dr. al-Saghir "assume[d] chlorine" was released when dichlor decomposed, when in reality nitrogen trichloride, a distinct substance, is released when dichlor decomposes. (al-Saghir Dep. 66-67). Moreover, Dr. al-Saghir made a similar statement in her February 6, 2009 report. (al-Saghir Dep. Ex. 16) ("Her symptoms started after exposure to chlorine.") Nonetheless, the witness argues that "any fumes in high concentration can cause RADS." (al-Saghir Dep. 69). Having said that, Dr. al-Saghir "does not know the minimum concentration of nitrogen trichloride necessary

¹⁴ Dr. al-Saghir eventually ordered and performed a methacholine challenge test for Mrs. Lemmermann in the midst of the litigation on June 2, 2009, just before the doctor's deposition was taken.

¹⁵ Undoubtedly, Dr. al-Saghir did not make such a conclusion because she was completely unaware of Mrs. Lemmermann's prior history with asthma before the June 11, 2005 incident, even at the time of formalizing her opinion in a report on February 6, 2009.

to cause” RADS, (DPFF ¶ 87), and “does not know the concentration of nitrogen trichloride to which Mrs. Lemmermann was exposed.” (DPFF ¶ 88). The witness has not made any statement indicating or explaining whether exposure to nitrogen trichloride can exacerbate preexisting asthma.

The court notes that there are two distinct aspects of any testimony from a medical expert on exposure causation: (1) an expert’s opinion on diagnosis of the specific ailment; and (2) an expert’s opinion on external causation for the specific ailment. Mary Sue Henifin, Howard M. Kipen & Susan R. Poulter, *Reference Guide on Medical Testimony*, in *Reference Manual on Scientific Evidence* 472 (2d ed. 2000). Each aspect of the testimony “should generally be assessed separately, since the bases for such opinions are often quite different.” *Id.* Accordingly, the court will examine each basis for the doctor’s conclusions in turn.

1. Dr. al-Saghir’s Opinion Regarding Diagnosis

The court finds striking flaws with Dr. al-Saghir’s methodology for diagnosing RADS as the infliction from which Mrs. Lemmermann suffers. Dr. al-Saghir admits, and both parties agree, that the “first diagnostic criterion of RADS is the absence of preexisting disorder, asthma symptomatology or history of asthma in remission, and exclusion of conditions that can simulate asthma.” (DPFF ¶ 98). In addition, all of the parties agree that the “fourth criterion for a valid diagnosis of RADS is the onset of asthma symptoms within minutes to hours, and less than 24 hours after the exposure.” (DPFF ¶ 191). Moreover, the parties do not dispute that absent the first

and fourth criterion, “a diagnosis of RADS would not be permissible.” (DPFF ¶ 98, ¶ 101). However, “Dr. al-Saghir has not abandoned her opinion that Mrs. Lemmermann suffers from RADS” (Pl’s Resp. Br. 17), despite: (1) Mrs. Lemmermann’s obvious history of battling asthma; (2) the fact Mrs. Lemmermann did not complain about shortness of breath on the day of the incident; and (3) all of the medical records from June 11, 2005, indicating that the plaintiff’s lungs were clear and free of injury. Given the clear disconnect between Dr. al-Saghir’s concessions regarding a proper diagnosis of RADS and the witness’ ultimate diagnosis for Mrs. Lemmermann, it appears that Dr. al-Saghir’s diagnosis is “mere speculation and therefore inadmissible.” *Lewis*, 561 F.3d at 705;¹⁶ see also *General Electric v. Joiner*, 522 U.S. 136, 146 (1997) (“A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.”).

However, the logical gaps in Dr. al-Saghir’s diagnosis are not the exclusive reason for the court excluding the witness’ testimony regarding the RADS diagnosis. The court also notes that the means by which the expert arrived at her conclusion was premised on: (1) the faulty information the plaintiff provided to the expert; and

¹⁶ Lemmermann attempts to distinguish *Lewis*, arguing the case is only applicable to its exact facts, a case where an expert diagnosed a disorder as being existent two and a half years before the examination and where the proponent of the expert raised no substantive arguments to support the expert’s testimony. *Lewis*, 561 F.3d at 706. *Lewis*, like many *Daubert* cases, is a product of the facts presented to the court. However, broad principles can be expounded from the case. In *Lewis*, the court found that when a medical expert makes a diagnosis well after a patient’s symptoms existed, only relies on the word of the patient in making the diagnosis, reviews few if any previous medical records in his or her examination, does not address the clear alternative causes for the patients symptoms in making the diagnosis, and has clear logical gaps in his or her conclusions, the court can find that the methodology the expert used to arrive at his or her conclusions is suspect. *Lewis* provides some clear guideposts for the district court to look to when evaluating the efficacy of expert medical testimony. Ultimately, there is nothing in *Lewis* to indicate the case is limited to the facts at play in that litigation.

(2) by looking at only the most recent medical records of the plaintiff. While initially relying on Mrs. Lemmermann's own word to make a diagnosis may not have been a poor methodology in and of itself, *Walker v. Soo Line R.R.*, 208 F.3d 581, 586 (7th Cir. 2000), continuing to rely on that methodology even though Mrs. Lemmermann's claims of not having a previous history of asthma are indisputably false leave the court puzzled as to how Dr. al-Saghir continues to insist that the plaintiff is suffering from RADS.¹⁷ The fact that Dr. al-Saghir only looked to Mrs. Lemmermann's most recent records when diagnosing her with RADS is particularly troubling, given that a proper diagnosis of RADS requires a history free of any indications of asthma. Moreover, the expert did not attempt to account for "obvious alternative explanations" for the plaintiff's symptoms, a factor militating against finding Dr. al-Saghir's methodology reliable. Fed.R.Evid. 702 advisory committee notes (2000 Amendments). Ultimately, Dr. al-Saghir fails to explain her diagnosis of RADS, and, ultimately, "[s]ome greater methodology is required to bridge the analytical gap between general principles and particular conclusions, and to vest thereby the opinion with requisite reliability." *Fuesting I*, 421 F.3d at 536.

¹⁷ In *Walker*, the Seventh Circuit stated that "in situations in which a medical expert has relied upon a patient's self-reported history and that history is found to be inaccurate, courts [will] usually allow those inaccuracies to be explored through cross-examination." *Walker v. Soo Line R.R.*, 208 F.3d 581, 586 (7th Cir. 2000). *Walker* based this conclusion on the broader principle that the factual underpinnings of an expert's analysis are best left to the trier of fact. *Id.* However, when there is no dispute as to the facts underlying an expert's analysis, the court can exclude evidence when the court is "at a loss" as to why an expert made a particular conclusion. *Masters v. Hesston Corp.*, 291 F.3d 985, 992 n.3 (7th Cir. 2002). Most importantly, the court is not so much concerned with the "soundness of the factual underpinnings" of Dr. al-Saghir's conclusions, as it is with the witness' failure to explain her conclusions given the undisputed facts. This case appears to be the rare case in which the expert appears to have all but conceded in her deposition testimony that she was incorrect in her initial diagnosis.

The expert's alternative diagnosis of Mrs. Lemmermann's condition is that she is suffering from an "exacerbation of preexisting asthma." Dr. al-Saghir never disclosed this diagnosis in her February 6, 2009 report. (al-Saghir Dep. Ex 16). In fact, the only time Dr. al-Saghir even hinted at this diagnosis prior to the plaintiff submitting proposed findings of fact to the court was at the tail end of her sworn deposition. The transcript of the deposition reads as follows in relevant part:

THE WITNESS: . . . The other thing, there's something – I mean, one of the subset [sic] of occupational asthma is exacerbation of preexisting asthma, so people who have asthma and, you know, on the record there was no evidence she used any inhalers for a few years prior to the incident, and then it could be that then her diagnosis would be that she has exacerbation of preexisting asthma.¹⁸

The above excerpt from Dr. al-Saghir's testimony is the only evidence in the record where the expert states any opinion on the issue of whether the plaintiff is suffering from an "exacerbation of preexisting asthma."

A central role of the court when deciding a *Daubert* motion is to "examine the methodology the expert has used in reaching his [or her] conclusions." *Smith v. Ford Motor Co.*, 215 F.3d 713, 718 (7th Cir. 2000). However, the burden is on the expert and the party proffering the expert to "explain the methodologies and principles supporting the opinion." *Minix v. Canarecci*, 597 F.3d 824, 835 (7th Cir. 2010). Here, the court is left dumbfounded as to why "exacerbation of preexisting

¹⁸ The court is at a loss regarding the exact context of Dr. al-Saghir's belated diagnosis regarding exacerbation of asthma, as the plaintiff opted to only provide a page of the deposition transcript. The court references its comments in its earlier footnote, again noting the importance of providing the court with as much information as possible to provide a reasoned decision at the summary judgment stage. The burden is on the party proffering the expert witness to provide the court with reasons for accepting the witness. If the party fails to do so, the party can only fault itself.

asthma” is a proper diagnosis in this case, and the plaintiff has provided nothing for the court to examine regarding the methodology used by Dr. al-Saghir to arrive at her conclusion.¹⁹ The Seventh Circuit has been clear: “[t]o be admissible under Rule 702, the expert’s opinion must offer more than a ‘bottom line.’” *Id.* at 835. Moreover, propelling the court’s conclusion that Dr. al-Saghir’s methodology regarding her alternative diagnosis of exacerbation is unreliable is the fact that the diagnosis appears to have been “cooked up” in the haste of deposition testimony after the doctor’s original diagnosis of RADS could not survive even the slightest scrutiny in the form of the opposing counsel’s questioning. In addition, the court finds Dr. al-Saghir’s conclusions about exacerbation of preexisting asthma remarkable, given that in her examination of Mrs. Lemmermann, the witness did not find that the plaintiff was wheezing or having severe problems with breathing, circumstances that only counsel against finding that Lemmermann was suffering from active asthma. Additionally, Dr. al-Saghir did not even hypothesize as to whether there are any alternative diagnoses for Mrs. Lemmermann, such as a *latent* asthma condition. Given the dubious circumstances in which Dr. al-Saghir proposed not only an alternative diagnosis, but a diagnosis that is diametrically opposed to the original diagnosis, and given the questionable methods Dr. al-Saghir employed to arrive at

¹⁹ It is obviously conceivable that Dr. al-Saghir made her alternative diagnosis on the basis of her own training and experience and based on her examination of the plaintiff. A witness’s own training and experience may be the foundation for an expert opinion, but “the witness 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.” Fed.R.Evid. 702 (advisory committee’s notes (2000 amendments)). Here, there has been no explanation for the diagnosis of exacerbation of asthma.

her conclusion, the court, as the gatekeeper against unreliable expert testimony, must exclude Dr. al-Saghir's conclusion that the plaintiff suffers from an "exacerbation of asthma." See *Kumho Tire Co.*, 526 U.S. at 147-49.

2. Dr. al-Saghir's Opinion Regarding Causation

However, even if the court were to accept as reliable Dr. al-Saghir's conclusions that Mrs. Lemmermann suffers from either: (1) RADS; or (2) an exacerbation of her asthma, the court would still have to exclude the witness' testimony, as the expert is primarily testifying to provide causation testimony – that is, she is testifying that Mrs. Lemmermann's afflictions are caused by her exposure to fumes resulting from dissolving *Sock It* in water – and her testimony on the external causation is not sufficiently reliable. The Federal Judicial Center's *Reference Manual on Scientific Evidence* provides a basic four step process for how an expert should make an evaluation of external causation:

Determining external causation . . . occurs in a stepwise fashion. In the first step the physician must establish the characteristics of the medical condition. Second, he or she defines the nature and amount of the environmental exposure. The third step is to demonstrate that the medical and scientific literature provides evidence that in some circumstances the exposure under consideration can cause the outcome under consideration. This step is synonymous with establishment of general causation. As part of this, the clinician attempts to establish the relationship between the dose and response, including whether thresholds exist, ultimately defining the clinical toxicology of the exposure. The fourth step is to apply this general knowledge to the specific circumstances of the case at hand, incorporating the specifics of exposure, mitigating or exacerbating influences, individual susceptibilities, competing or synergistic causes, and any other relevant data.

Mary Sue Henifin, Howard M. Kipen & Susan R. Poulter, *Reference Guide on Medical Testimony*, in *Reference Manual on Scientific Evidence* 468-71 (2d ed. 2000). Moreover, the *Reference Manual on Scientific Evidence* notes that “critical to a determination of causation is characterizing exposure,” for which the expert should acquire,

~~four cardinal pieces...of information:~~ 1. The material agent in the environmental exposure should be identified. 2. The magnitude or concentration of an exposure should be estimated, including use of clinical inference. 3. The temporal aspects of the exposure should be determined – whether the exposure was short-term and lasted a few minutes, days, weeks, or months, or was long-term and lasted for years. Similarly, the latency between exposure and disease onset is often critical. 4. If possible, the impact on disease or symptoms should be defined.

Id. at 472. Federal courts, including those within this circuit, have used the framework in the *Reference Manual on Scientific Evidence* in analyzing the methodology of an expert providing testimony espousing an external cause for a particular medical ailment. See, e.g., *Cunningham v. Masterwear, Inc.*, No. 04-CV-1616, 2007 U.S. Dist. LEXIS 29156, at *11-12 (S.D. Ind. Apr. 19, 2007) (Tinder, J.).

Here, the expert has provided the court with little to no explanation for her conclusions that the plaintiff suffers from RADS or an exacerbation of her previous asthma *as a result of* the incident on June 11, 2005. In fact, the overwhelming bulk of the plaintiff’s submissions to the court defend how Dr. al-Saghir arrived at her diagnoses. (Pl’s Resp. Br. 15) (“Dr. al-Saghir’s *diagnosis* is the result of her own examination, continued treatment, and testing of Ms. Lemmermann, as well as of Ms. Lemmermann’s medical history . . . Among other things, Dr. Al-Saghir’s past

experience in observing and treating patients with RADS provided her with the necessary background to *diagnose* Ms. Lemmermann with such condition [sic].”). However, the court is at a loss as to how Dr. al-Saghir concluded that Mrs. Lemmermann’s alleged ailments, especially the “exacerbation of her previous asthma,” is the product of what occurred on June 11, 2005.²⁰ The expert did not appear to examine any medical literature on whether nitrogen trichloride could cause the diagnosed ailments, nor does the witness cite to any data supporting her opinion, flaws that justify this court excluding the witness’ testimony. *Ervin*, 492 F.3d at 904.²¹ Moreover, Dr. al-Saghir did not investigate the magnitude of Mrs. Lemmermann’s exposure to nitrogen chloride; in fact, the witness has no idea what “concentration of nitrogen trichloride to which Mrs. Lemmermann was exposed.” (DPFF ¶ 88). In

²⁰ The Center for Disease Control and Prevention provides a nearly endless list of “triggers” of asthma, including secondhand smoke, dust mites, outdoor air pollution, cockroach allergens, “furry pets,” and physical exercise. Center for Disease Control and Prevention, “Important Asthma Triggers,” April 27, 2009 <http://www.cdc.gov/Asthma/triggers.html> (accessed May 12, 2010). To assume that Mrs. Lemmermann’s exacerbated asthma was “caused by” what occurred on June 11, 2005, without considering alternatives indicates the woeful methodology employed by the witness, particularly when Dr. al-Saghir made the belated diagnosis of exacerbation of asthma four years after the event in question. *Lewis*, 561 F.3d at 706.

²¹ The plaintiff attempts to distinguish *Ervin* arguing that its holding is limited to its facts, namely cases where a doctor is using differential diagnosis. There is nothing in the opinion to make such a conclusion. *Ervin* makes clear where an expert makes a conclusion without pointing to any data to support his or her claim or without being able to articulate his or her findings, the court must find the expert’s opinion unreliable and, therefore, excludable. *Ervin*, 492 F.3d at 904-05. More notable, however, is that, in the plaintiff’s seemingly desperate attempts to distinguish away every case cited by the defendant, the plaintiff has admitted that the expert did not engage in “differential diagnosis.” (Pl. Resp. Br. 14). Differential diagnosis is a “term used by physicians to refer to the process of determining which of two or more diseases with similar symptoms and signs the patient is suffering from, by means of comparing the various competing diagnostic hypotheses with the clinical findings.” Mary Sue Henifin, Howard M. Kipen & Susan R. Poulter, *Reference Guide on Medical Testimony*, in Reference Manual on Scientific Evidence 481 (2d ed. 2000). Here, this case seems to scream out for differential diagnosis, given that the expert has hypothesized that the plaintiff suffers from one of two diseases and the defendant argues that the plaintiff suffers from a third. However, instead of engaging in differential diagnosis, eliminating possible causes of the plaintiff’s ailments, the expert seems to have leapt to one conclusion immediately, diagnosing Mrs. Lemmermann with RADS, and then, four years later, the expert opted to add another diagnosis that is mutually exclusive with the first diagnosis after being challenged during a deposition. In sum, the court finds the expert’s approach sloppy and indicative of an unreliable method.

short, the expert has not undertaken any effort to explain her findings regarding causation, let alone engaged in a methodology akin to that recommended in the *Reference Manual on Scientific Evidence*.²² Given that the “object” of *Daubert* was to “make sure that when scientists testify in court they adhere to the same standards of intellectual rigor that are demanded in their professional work,” *Rosen*, 78 F.3d at 318, the court is obliged to exclude Dr. al-Saghir’s testimony in its entirety.

The plaintiff attempts to paint the defendants’ objections to Dr. al-Saghir’s testimony as a “battle of the experts” and as “one to be decided by the jury as a matter of credibility.” However, as discussed above, the motion to exclude Dr. al-Saghir’s testimony is not a “battle” in any sense of the word, as Dr. al-Saghir and the plaintiff are not properly “equipped for the fight.” The doctor’s testimony is conclusory and does not exhibit even the slightest signs of reliability and, accordingly, under *Daubert* and its progeny, the court must exclude such evidence from the jury’s consideration. *Kumho Tire Co.*, 526 U.S. at 152. The central case cited by the plaintiff in opposition to the motion to exclude Dr. al-Saghir’s testimony is *Walker*, which stated that medical professionals can rely on “self-reported patient histories” and the “opinions of other medical professionals in forming their opinions.” *Walker*, 208 F.3d at 586. However, even accepting the Seventh Circuit’s statement as true, *Walker* is inapplicable with regard to the question of “external causation”

²² This is not to say that every expert testifying regarding external causation must follow the method in the *Reference Manual on Scientific Evidence*. Rather, the court is merely, by comparison, demonstrating how Dr. al-Saghir’s methodology was completely divorced from other acceptable methods for determining an external cause for a medical ailment.

testimony, as the *Walker* court only found that a medical doctor could rely on self-reported patient histories and the statements of medical professionals that were in factual dispute in making a *diagnosis*. Nothing in *Walker* speaks to the question of what is a proper methodology with regard to an expert opining on an external cause for a given medical ailment.²³ With no other principled objections to excluding Dr. al-Saghir's testimony, the court will grant the defendants' motion to exclude Dr. al-Saghir from testifying as an expert regarding medical causation, and the court proceeds to address the summary judgment motion.

II. The Motion for Summary Judgment

Coupled with the motions to exclude the expert testimony of Mr. Schuck and Dr. al-Saghir was a motion for summary judgment. (Docket #16). Summary judgment is appropriate where the "pleadings, the discovery, and disclosure materials on file, and any affidavits show that there is no genuine issue of material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c); *Wis. Alumni Research Found. v. Xenon Pharms., Inc.*, 591 F.3d 876, 882 (7th Cir. 2010). A genuine issue of material fact exists when a reasonable jury could find in favor of the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). "The initial burden is on the moving party . . . to demonstrate that

²³ The plaintiff also references *Michaels v. Mr. Heater, Inc.*, 411 F. Supp. 2d 992, 998 (W.D. Wis. 2006), in support of the admissibility of Dr. al-Saghir's testimony. However, the quote the plaintiff provides from *Michaels* only indicates that courts cannot exclude testimony based on faulty factual underpinnings or on questionable conclusions. Nothing in *Michaels* states that a court must allow an expert's testimony whose underlying methodology is severely flawed. Here, the court does not rely on the fact that Dr. al-Saghir's diagnoses are mutually exclusive in excluding his testimony. However, the court does find that the witness' conclusions are indicative of a flawed methodology, as discussed in the body of this order.

there is no material question of fact with respect to an essential element of the non-moving party's case." *Delta Consulting Group, Inc. v. R. Randle Constr., Inc.* 554 F.3d 1133, 1137 (7th Cir. 2009) (quoting *Cody v. Harris*, 409 F.3d 853, 860 (7th Cir. 2005)). Once the movant satisfies this initial burden, the burden then shifts to the non-moving party who "may not rest upon the mere allegations or denials of his pleading, but . . . must set forth specific facts showing that there is a genuine issue for trial." *Doe v. Cunningham*, 30 F.3d 879, 883 (7th Cir. 1994) (quoting *Anderson*, 477 U.S. at 248). In ruling on a summary judgment motion, the court must view the evidence plus all inferences reasonably drawn from the evidence in the light most favorable to the non-moving party. *TAS Distributing Co., Inc. v. Cummins Engine Co., Inc.*, 491 F.3d 625, 630 (7th Cir. 2007). With these standards in mind, the court looks to the specific allegations made by the plaintiff.²⁴

Lemmermann's complaint alleges two claims for relief, both stemming from the lack of a warning on the product the plaintiff used: (1) negligence; and (2) strict liability. The negligence claim alleges that "the act of pre-mixing . . . *Sock It* in small amounts of water creates a dangerous condition," that Arch Chemicals had a duty to warn Lemmermann about the danger, and that Arch Chemicals' breach of its duty resulted in Lemmermann's injuries. (Compl. ¶¶ 16-25). In support of the strict liability claim, the plaintiff contends that the product *Sock It* was "defective and

²⁴ The court notes that the law that will be applied in this case on all of the claims is Wisconsin law. In federal court, the choice of law is determined by the choice of law rules of the forum state. See *Klaxon Co. v. Stentor Elec. Mfg. Co.*, 313 U.S. 487, 496-97 (1941). When the parties do not dispute what law should be applied, the court should apply forum law. *Futuresource L.L.C. v. Reuters Ltd.*, 312 F.3d 281 (7th Cir. 2002).

unreasonably dangerous” “due to the lack of proper warnings” regarding the danger created by “pre-mixing *Sock It* with water.” (Compl. ¶¶ 26-33). Moreover, Lemmermann contends that she has sustained “substantial and permanent” personal injuries from the incident. (Compl. ¶ 14).

Under Wisconsin law, while plaintiffs are permitted to bring both strict liability and negligence claims premised upon the inadequacy of a product’s warnings, Wisconsin courts have not distinguished between the standards for liability governing each type of claim. *Tanner v. Shoupe*, 228 Wis. 2d 357, 365 n.3 (Ct. App. 1999) (“[W]hen the strict products liability claim is that the product was defective because the warnings were inadequate, the plaintiff must prove the defendant had a duty to warn and the danger was reasonably foreseeable In effect, this requirement of proof is the same as that needed for a claim of negligence”); see also *Mohr v. St. Paul Fire & Marine Ins. Co.*, 2004 WI App 5, ¶ 32 n.10 (Ct. App. 2003) (“[T]he proof requirements for an inadequate warning on a strict product liability claim are the same as for breach of the duty to warn on a negligence claim.”). Accordingly, to prevail on either of her two claims against the defendants, Lemmermann must be able to prove the four elements of a duty to warn claim: (1) existence of a duty to warn; (2) proof of a failure to warn adequately; (3) proof of causation of injury; and (4) actual damages resulted from the injury. *Kessel v. Stansfield Vending, Inc.*, 2006 WI App. 68, ¶15, 714 N.W.2d 206 (Ct. App. 2006); see also *Schreiner v. Wieser Concrete Prods.*, 2006 WI App 138, ¶ 8 (Ct. App.

2006). A manufacturer has a duty to warn consumers of dangers that they know or should know are associated with the use of their products. *Strasser v. Transtech Mobile Fleet Service, Inc.*, 2000 WI 87, 236 Wis. 2d 435, 459, 613 N.W.2d 142, 154 (2000). The adequacy of a warning is typically a question for the jury, but “that is not always so,” as the court can find a warning was adequate where “no reasonable jury, properly instructed, could find defendant was negligent.” *Kurer v. Parke, Davis & Co.*, 2004 WI App 74, ¶ 24 (Ct. App. 2004). Finally, “a plaintiff who has established both a duty and a failure to warn must also establish causation by showing that, if properly warned, he or she would have altered behavior and avoided injury.” *Id.* at ¶ 25. Moreover, with regard to “unusually complex or esoteric issues,” a court may not permit a case to “go to the jury” without expert testimony to aid the jury. *Weiss v. United Fire & Casualty Co.*, 197 Wis. 2d 365, 379, 541 N.W.2d 753 (1995).

In this case, the defendants argue without Mr. Schuck’s testimony on liability and without Dr. al-Saghir’s testimony regarding causation that the defendants are entitled to judgment as a matter of law on all counts. The court finds that the defendants have satisfied their initial burden in showing that there are no material facts in dispute and that judgment should be entered in its favor, and accordingly looks to the plaintiff to see if there is any evidence supporting her duty to warn or strict liability claims. *Celotex Corp. v. Cartrett*, 477 U.S. 317, 322-23 (1986). The plaintiff raises a number of arguments for why her claims should survive summary judgment, even without the testimony of the two experts.

First, the plaintiff contends that Arch Chemicals' own Material Safety Data Sheet regarding *Sock It* on its own indicates that the product has a propensity to explode when mixed with water. The court finds the Material Safety Data Sheet for *Sock It*, at best for the plaintiff, is ambiguous as to whether combining uncontaminated dichlor and water would cause an explosion. The data sheet merely states that if the product becomes "damp/wet or contaminated in a container the formation of nitrogen trichloride gas *may occur*" (emphasis added). The data sheet alone begs more questions than it resolves²⁵ and, ultimately, this is a case where a qualified and reliable expert is needed to testify that mixing uncontaminated *Sock It* in water will cause an explosion because of the specialized knowledge required to gauge whether the product at question can cause such a reaction. See *Peters v. Astrazeneca LP*, 224 Fed. Appx. 503, 506 (7th Cir. 2007) (holding that because of the "specialized knowledge required" to prove an element of the claim, the plaintiff could not overcome an "almost insurmountable hurdle in contesting the defendants' summary judgment motion" "without expert testimony.") As a result, the defendants are entitled to summary judgment because there is no duty to warn about the risk associated with creating a concentrated solution of dichlor and water, as no evidence indicates danger results from using *Sock It* in that fashion.

²⁵ The data sheet states that when dichlor becomes wet or damp it "may" explode. However, the court is left to wonder whether dichlor and water is a sufficient combination to create such a reaction or whether some other substance is needed to create such a reaction.

The lack of any evidence supporting the claim of liability alone is reason to grant the defendants' motion for summary judgment. The court also notes, however, that even assuming the defendants had a duty to warn Lemmermann about the dangers of *Sock It* and the defendants breached their duty to warn, the plaintiff's claim would still fail because of a lack of evidence proving causation. The plaintiff contends that, even if Dr. al-Saghir cannot testify as an expert witness regarding causation, the doctor can still testify in her capacity as a treating physician with respect to what caused Mrs. Lemmermann's injuries. It is beyond question that, while a treating physician can testify with regard to his or her observations of and treatment provided to a patient, the treating physician becomes an "expert witness" – and with that is subject to the requirements of Rule 702 and *Daubert* – if the treating physician is opining on matters regarding causation. *O'Conner v. Commonwealth Edison Co.*, 13 F.3d 1090, 1105 n.14 (7th Cir. 1994) (“[W]e do not distinguish the treating physician from other experts when the treating physician is offering expert testimony regarding causation”); see also *Musser v. Gentiva Health Servs.*, 356 F.3d 751, 757 n.2 (7th Cir. 2004) (“Thus, a treating doctor (or similarly situated witness) is providing expert testimony if the testimony consists of opinions based on "scientific, technical, or other specialized knowledge" regardless of whether those opinions were formed during the scope of interaction with a party prior

to litigation.”).²⁶ As discussed earlier in this order, any opinion by Dr. al-Saghir regarding causation has been excluded, and, without any other evidence that Mrs. Lemmermann’s ailments would have been avoided with a proper warning, *Schriener*, 2006 WI App 138 at ¶ 8, the plaintiff has failed to meet her burden of providing evidence that supports her claims.²⁷

In what can only be described as a “last ditch” argument, the plaintiff attempts, through her brief to amend her complaint, arguing that her claim for failure to warn is not exclusively premised on the contention that Arch Chemicals should have warned the plaintiff that creating a concentrated solution of *Sock It* and water will cause an explosion. Rather, the plaintiff, at the second to last page of her response brief, argues that her claim *also* includes the contention that Arch Chemicals provided *inadequate* warnings by not advising the plaintiff to avoid “*any* contamination” when mixing *Sock it* with water. The latter claim is wholly absent from the plaintiff’s complaint, and when a claim is not “clearly articulated” in a complaint, the plaintiff cannot advance such a claim to survive summary judgment,

²⁶ The court notes that the only cases cited by the plaintiff to support her claim that a treating physician can testify as to external causation are from the Third Circuit, the Northern District of Ohio, and the Eastern District of Virginia. The court is bound to follow the clear statements of the Seventh Circuit.

²⁷ The plaintiff, all but in passing, argues in her brief that the “defendants’ own expert acknowledges that Ms. Lemmermann suffered injuries as a result of the explosion.” (Pl.’s Resp. Br. 27). The plaintiff is being disingenuous, however. The defendants’ expert admits the plaintiff had superficial injuries as a result of the incident, but quite succinctly states that the injuries alleged by the plaintiff are either non-existent or were not caused by the June 11, 2005 incident. If the only injuries resulting from the incident are, at best, *de minimis*, the court cannot retain jurisdiction over the case, as the amount in controversy would be trivial. Moreover, a fundamental element of a failure to warn claim is that actual damages resulted from the injury; without any actual damages, the plaintiff’s complaint fails. *Kessel*, 2006 WI App. 68 at ¶15 (holding that “actual damages” must exist in order to prevail on a claim of failure to warn); *see also Foskett v. Great Wolf Resorts, Inc.*, 518 F.3d 518, 523 (7th Cir. 2008) (“There can be no tort liability without damage to persons or property”) (internal citations omitted).

as a plaintiff's pleadings must "give the defendant fair notice of what the plaintiff's claim is *and the grounds upon which it rests.*" *Glover v. Haferman*, 252 Fed. Appx. 757, 761 (7th Cir. 2007) (emphasis added).

However, even if the plaintiff articulated a claim regarding the inadequacy of the warning regarding the risk posed by contamination, the plaintiff has nothing in terms of evidence to support the claim. Both parties agree that Mrs. Lemmermann never contended that she contaminated the product when mixing it with water. (Pl's Resp. Br. 27; Def's Br. 9, n.2). As a consequence, there cannot be any causal link between the inadequacy of the warning on the *Sock It* label regarding contamination and Mrs. Lemmermann's injuries. Moreover, Arch Chemicals' product conspicuously warns that an explosion can occur when the product has been contaminated.²⁸ The plaintiff has proffered no evidence, such as a human factors expert, to indicate that the warning on the label was somehow inadequate,²⁹ and the court can readily conclude that "no reasonable jury, properly instructed, could find defendant was

²⁸ The product label states in bold face and in all capital letters:

DO NOT USE THIS PRODUCT IN ANY CHLORINATING DEVICE WHICH HAS BEEN USED WITH ANY INORGANIC OR UNSTABILIZED CHLORINATING COMPOUNDS . . . SUCH USE MAY CAUSE FIRE OR EXPLOSION . . . CONTAMINATION WITH MOISTURE, DIRT, INORGANIC MATTER, OR OTHER CHEMICALS (INCLUDING OTHER POOL CHEMICALS) OR ANY OTHER FOREIGN MATTER MAY START A CHEMICAL REACTION. THIS REACTION WILL GENERATE HEAT, LIBERATION OF HAZARDOUS GASSES AND POSSIBLE HEAT AND/OR EXPLOSION.

²⁹ Moreover, even assuming the plaintiff's assertion, unsupported by any evidence, that the Arch Chemicals' Help Line Operator instructed the plaintiff to mix dichlor with water without warning about contamination, there is absolutely no evidence to indicate that the clear and conspicuous warning on the *Sock It* label was insufficient to warn the plaintiff about the danger of contaminating the product with a foreign substance.

negligent.” *Kurer*, 2004 WI App 74 at ¶ 24. In short, the court rejects the plaintiff’s belated attempt to reposition the claim made in her pleadings.

Ultimately, the plaintiff has no evidence to support critical elements of her duty to warn or strict liability claims. The expert testimony proffered by the plaintiff screams of unreliability and cannot survive the *Daubert* test for expert evidence, let alone the “laugh test.” Lemmermann provides no other reasons for why the plaintiff can survive summary judgment, and, as a result, the court is obliged to find that the defendants are entitled to judgment as a matter of law.³⁰

Accordingly,

IT IS ORDERED that defendants’ motion to “exclude opinion testimony and evidence of plaintiff’s designated expert, Michael D. Schuck, P.E.” (Docket #20) be and the same is hereby **GRANTED**;

IT IS FURTHER ORDERED that defendants’ motion to “exclude opinion testimony and evidence of plaintiff’s designated expert, Rula al-Saghir, M.D.” (Docket #22) be and the same is hereby **GRANTED**;

IT IS FURTHER ORDERED that defendants’ motion for summary judgment (Docket #16) be and the same is hereby **GRANTED**;

IT IS FURTHER ORDERED that plaintiff’s “motion in limine to exclude expert testimony and evidence from Sonia Oberson” (Docket #35) be and the same is hereby **DENIED** as moot;

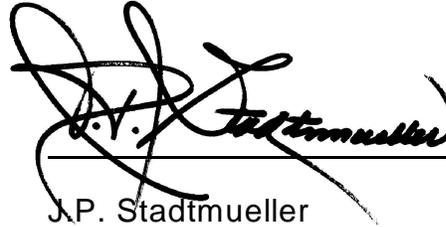
³⁰ Accordingly, the motion to exclude Ms. Sonia Oberson’s testimony, the defendants’ expert, is mooted by the court’s rulings on the other motions.

IT IS FURTHER ORDERED that this action be and the same is hereby **DISMISSED** with prejudice.

The Clerk of the Court is directed to enter judgment accordingly.

Dated at Milwaukee, Wisconsin, this 18th day of May, 2010.

BY THE COURT:

A handwritten signature in black ink, appearing to read "J.P. Stadtmueller", written over a horizontal line. The signature is stylized and somewhat illegible due to its cursive nature.

J.P. Stadtmueller
U.S. District Judge