

United States District Court
Southern District of New York

1:20-cv-03588-RA

Carmen Rivera, Letisha Williams,
Rosemary Vavitsas, Lisa Mack,
individually and on behalf of all others
similarly situated,

Plaintiffs,

- against -

S. C. Johnson & Son, Inc.,

Defendant

Third Amended
Class Action Complaint

Jury Trial Demanded

Plaintiffs Carmen Rivera, Letisha Williams, Rosemary Vavitsas, and Lisa Mack (“Plaintiffs”), by their undersigned attorneys, allege upon information and belief, except for allegations pertaining to plaintiffs, which are based on personal knowledge:

1. S. C. Johnson & Son, Inc. (“Defendant”) manufactures, distributes, markets, labels and sells cleaning solutions under its popular “Windex” brand, prominently labeled as consisting of a “Non-Toxic Formula” (“Products”).

2. The Products include Original Non-Toxic Formula, Vinegar Non-Toxic Formula, Ammonia-Free Non-Toxic Formula and Multi-Surface Non-Toxic Formula, available to consumers from retail and online stores of third-parties, with examples of the deceptively labeled Products below.

Windex Original Non-Toxic Formula



Windex Vinegar Non-Toxic Formula



Windex Ammonia-Free Non-Toxic Formula



Windex Multi-Surface Non-Toxic Formula



3. In recent years, consumers have become significantly more aware and sensitive of their impact on the environment through the products they choose to purchase and use in their daily lives.

4. Many consumers desire to purchase and use natural, environmentally sound and safer alternatives to traditional glass and window cleaners.

5. As a result, a market has developed for consumer products that contain natural ingredients, do not cause physical harm and are environmentally sound, *i.e.*, that are made from recycled goods, that are biodegradable or other signifiers that the product itself is less harmful to the environment in its production, use or disposal.

6. Defendant markets and sells the Products as environmentally-friendly alternatives to traditional window and glass cleaning products.

7. To appeal to environmentally conscious consumers, the packaging represents that the bottle is made of “100% Ocean Plastic” or “100% Recycled Plastic” and that the Products are “Non-Toxic.”

8. The Federal Trade Commission (FTC) has issued guidelines for products marketed with such environmental messages in the form of Green Guides (“Guides”).

9. The Guides apply to the marketing and sale of products purported to be environmentally-friendly to “help marketers avoid making environmental marketing claims that are unfair or deceptive.” 16 C.F.R. § 260.1.

10. The Guides prohibit “deceptive acts” or representations which are “likely to mislead consumers acting reasonably under the circumstances and [are] material to consumers’ decisions,” including representations made through labeling, advertising or other promotional services. 16 C.F.R. § 260.1.

11. Specifically, “it is deceptive to misrepresent, directly or by implication, that a product, package or service is non-toxic” and “a non-toxic claim likely conveys that a product, package, or service is non-toxic for humans and for the environment generally.” 16 C.F.R. § 260.10(a).

12. To accurately and non-deceptively claim that a product is “non-toxic,” marketers must have reliable scientific evidence to make such a claim or “should clearly and prominently qualify their claims to avoid deception.” 16 C.F.R. § 260.10(b).

13. The EPA has cautioned that non-toxic claims might prevent consumers from taking necessary precautions in handling a product and the FTC warned marketers to qualify non-toxic claims carefully unless the marketers can validate all express and implied messages inherent in an unqualified non-toxic claim.¹

14. Indeed, in commenting on the Green Guides, the EPA “believes that marketers will ‘rarely, if ever, be able to adequately qualify and substantiate such a claim of ‘non-toxic’ in a manner that will be clearly understood by consumers.’”²

15. The Products’ “non-toxic” claims signify to reasonable consumers that the Products will not be harmful to people (including small children), common pets or the environment.³

16. Defendant’s advertising and marketing of the Product has been admonished by the National Advertising Division of the Council of Better Business Bureaus Inc. (NAD), which “monitors national advertising in all media, enforcing high standards of truth and accuracy” and

¹ FTC, The Green Guides Statement of Basis and Purpose at 147.

² EPA Comments on Proposed Revisions to Green Guides (2010) (available at https://www.ftc.gov/sites/default/files/documents/public_comments/guides-use-environmentalmarketing-claims-project-no.p954501-00288%C2%A0/00288-57070.pdf)

³ <https://bbbprograms.org/media/details/nad-recommends-s.c.-johnson-discontinue-non-toxic-claim-on-windex-vinegar-glass-cleaner-advertiser-to-appeal-to-narb>

“examines advertising claims made for . . . ‘green’ or natural claims.”⁴

17. Around March 2020, the NAD launched an investigation into the Products’ “non-toxic” claims and found, following FTC precedent, that the term “non-toxic” as used by the Products signifies to reasonable consumers that the Products will not be harmful to people (including small children), common pets or the environment.⁵

18. The NAD concluded that a reasonable consumer’s understanding of “will not harm” is not limited to toxins that cause death but “also various types of temporary physical illness, such as vomiting, rash and gastrointestinal upset.”⁶

19. Contrary to the Products’ claims of being “non-toxic,” the Products contain ingredients that may be, and are, harmful to humans, household pets or the environment generally.

20. Several of the Products’ ingredients are inconsistent with an unqualified non-toxic claim as that term is applied and understood by consumers.

21. While Defendant makes its prominent and unqualified non-toxic claim on the Products’ packaging, the packaging fails to disclose the presence of the potentially harmful and toxic compounds.

22. In spite of the labeling, the Products contain, in varying combinations, ingredients that are harmful to humans, animals, and/or the environment, at “In-use concentrations,” defined as the concentration or percentage by weight of the ingredient in the Products.

23. Since Defendant does not provide chemical ingredient and weight fraction information, despite its claim that “that transparency is an essential part of choosing safe and

⁴ <https://bbbprograms.org/programs/nad/nad-contact-us> (April 2, 2020).

⁵ <https://bbbprograms.org/media/details/nad-recommends-s.c.-johnson-discontinue-non-toxic-claim-on-windex-vinegar-glass-cleaner-advertiser-to-appeal-to-narb>

⁶ *Id.*

effective products for your home,” Plaintiffs consulted with toxicologist Lucy Fraiser, who indicated that it is necessary to use “quantitative patent-based information...to estimate ranges of ingredient compositions” in the Windex Products. *See* Declaration of Lucy Fraiser (“Fraiser Decl.”), ¶ 48, and accompanying Exhibits.⁷

24. The Products contain the following ingredients:

Windex Original Glass Cleaner

- 2-Hexoxyethanol
- Isopropanolamine
- Ammonium Hydroxide
- Sodium C10-16 Alkylbenzenesulfonate
- Sodium Xylene Sulfonate
- Methylpropional
- Citronellol
- Citrus Aurantium Dulcis Peel Oil
- Hexyl Cinnamal
- Linalool
- Terpineol

Windex Vinegar Cleaner

- 2-Hexoxyethanol
- Propylene Glycol
- Acetic Acid
- Lactic Acid
- Linalool
- Linalyl Acetate

Windex Multi-Surface Cleaner

- 2-Hexoxyethanol
- Propylene Glycol
- Sodium Hydroxide
- Sodium C10-16 Alkylbenzenesulfonate
- Sodium Xylene Sulfonate
- Sodium Petroleum Sulfonate
- Linalool
- Linalyl Acetate

Windex Crystal Rain (Ammonia-Free)

- 2-Hexoxyethanol
- Isopropanolamine
- Sodium C10-16 Alkylbenzenesulfonate
- Sodium Xylene Sulfonate
- Benzyl Benzoate
- Lauramine Oxide
- Sodium Hydroxide
- 4-Tert-Butylcyclohexyl Acetate
- Butylphenyl Methylpropional
- C11-15 Sec-Pareth-12
- Hexamethylindanopyran
- Hexyl Cinnamal
- Tetramethyl Acetyloctahydronaphthalenes

25. The toxic ingredients’ effects are listed below.

⁷ Exhibit 1, Testimony and Depositions of Lucy Fraiser; Exhibit 2, Windex® Product Ingredient Summary; Exhibit 3, Chemicals with Effects at Probable In-Use Concentrations.

26. **Acetic Acid.** The concentration of acetic acid in Windex® products are estimated to range from 0.01 – 10%.” Fraiser Decl. ¶ 97 citing Exhibit 2, Windex® Product Ingredient Summary. At a concentration of 5%, “Acetic Acid has been labeled a severe ocular irritant in rabbits and 10% Acetic Acid is a skin irritant.” Fraiser Decl. ¶ 100.

27. **Alkylbenzene Sulfonate (Linear Alkylbenzene Sulfonate (“LAS”)).** Upon information and belief, alkylbenzene sulfonate, including sodium C10-16 alkylbenzenesulfonate, can cause skin and eye irritation at in-use concentrations. In addition, upon information and belief, alkylbenzene sulfonate can cause damage to certain plants and seedlings.

28. **Ammonium Hydroxide.** Upon information and belief, ammonium hydroxide can cause conjunctivitis and corneal damage at in-use concentrations.

29. **Fragrances.** The concentrations of fragrances, in all four of the Windex Products, “are estimated to range from 0.001 to 1%.” Fraiser Decl. ¶ 59 citing Exhibit 2.

30. Fragrance refers to the combination of chemicals (or “Fragrance Components”) in a product that gives the product its distinct scent.

31. The Fragrance Components in the Products include, in varying combinations, **Benzyl Benzoate, Methylpropional; Citronellol; Citrus Aurantium Dulcis Peel Oil; Hexyl Cinnamal; Terpineol; Linalool; Linalyl Acetate; 4-Tert-Butylcyclohexyl Acetate; Butylphenyl Methylpropional; C11-15 Sec-Pareth-12; Hexamethylindanopyran; Hexyl Cinnamal; and Tetramethyl Acetyloctahydronaphthalenes.**

32. Fragrances have an intrinsic ability to cause sensitization by skin contact.

33. And given human heterogeneity, the achievement of zero risk of induction of contact dermatitis from fragranced products is unattainable, regardless of the small amount of fragrance added to consumer products.

34. Indeed, a sizeable segment of the American population reports adverse reactions to fragranced products, with 30.5% reporting that scented products are irritating and 19% experiencing headaches, breathing difficulties, and other problems from fragranced products.

35. In addition, individuals with asthma and chemical sensitivity report adverse effects to scented products in higher proportions than the general public.

36. Therefore, certain consumers exposed to these fragrances will experience some combination of eye, nose, and/or throat irritation, respiratory difficulty, possibly bronchoconstriction or asthma-like reaction, and central nervous systems reactions (e.g., dizziness, incoordination, confusion, fatigue).

37. In fact, Defendant discloses on its website—but not on the Products’ labeling—that each of the Fragrance Components listed *supra* are **skin allergens**.

38. Moreover, Citronellol, Cinnamal, and Linalool are all listed on the European Union Allergens List as recognized allergens.

39. **4-Tert-Butylcyclohexyl Acetate**. According to studies, “0.1 ml of 0.625% 4-tert-butylcyclohexyl acetate caused slight conjunctival irritation with chemosis,” which causes appearance of blister-like condition in the eyelids of rabbits, with discharge.” Fraiser Decl. ¶ 64.

40. **Lyrall (4-(4-Hydroxy-4-Methylpentyl) Cyclohex-3-Enecarbaldehyde)**. At concentrations as low as 1%, 1% of human subjects “had a positive skin patch test” when exposed to Lyrall. Fraiser Decl. ¶ 62.

41. **Benzyl Benzoate**. “At concentrations ranging between 1% and 10%, reports have shown weak skin sensitization in humans to Benzyl Benzoate.” Fraiser Decl. ¶ 63.

42. **Citronellol**. Exposure of skin to Citronellol at a “concentration ranging from 0.5% to 1% caused positive skin patch test reactions in a small percentage of human test subjects (0.12% and 0.2%, respectively).” Fraiser Decl. ¶¶ 64-66.

43. **Isopropanolamine (“IPA”)**. Isopropanolamine, in two of the Products, has an “estimated concentration between 0 and 2%.” Fraiser Decl. ¶ 73 citing Exhibit 2. Studies have shown that “instillation of 0.1 ml of a 1% aqueous solution of IPA into the conjunctival sac of one eye of New Zealand white rabbits caused slight to moderate conjunctival redness in all rabbits that was gone within 72 hours.” Fraiser Decl. ¶ 74.

44. **Lactic Acid**. The concentrations of lactic acid in “Windex® products are estimated to range from 0.0001 – 0.1%.” Fraiser Decl. ¶ 93 citing Exhibit 2. Studies have indicated that lactic acid “causes redness, skin peeling, and drying of the skin.” Fraiser Decl. ¶ 95.

45. **Lauryl Dimethyl Amine Oxide (Lauramine Oxide)**. The concentrations of lauramine oxide, in two of the Windex Products, “are estimated to range from 0 to 5%.” Fraiser Decl. ¶ 88 citing Exhibit 2. One study found that “concentrations of 0.3% caused slight to moderate erythema (redness) with slight edema (swelling), fissuring (splitting/cracking), and slight to moderate epithelial desquamation.” Fraiser Decl. ¶ 89. In human subjects, just 2% of lauramine oxide has the potential for “mild cumulative skin irritation,” and at 3.7%, this compound is a “mild irritant.” Fraiser Decl. ¶ 90. Thus, “Lauramine Oxide is a mild skin irritant, with potential for mild cumulative irritation at in-use concentrations.” Fraiser Decl. ¶ 91.

46. **Propylene Glycol (Propane, 1,2-Diol)**. The concentrations of propylene glycol, in two of the Windex Products, “are estimated to be between 0 and 10%.” Fraiser Decl. ¶ 77 citing Exhibit 2. Propylene glycol is a skin sensitizer in women “experiencing chronic venous insufficiency, [where] over 8% “were sensitized to 5% Propylene Glycol, while 5% Propylene

Glycol via skin patch test in patients with contact dermatitis did not cause any test subjects to become sensitized.” Fraiser Decl. ¶ 78 citing Exhibit 2.

47. **Sodium Hydroxide.** The concentrations of sodium hydroxide, in two of the Windex Products “are estimated to be between 0.01 to 2%.” Fraiser Decl. ¶ 85 citing Exhibit 2. At concentrations as low as 0.5%, “Sodium Hydroxide has been shown to be an irritant.” Fraiser Decl. ¶ 86.

48. **Sodium C14-17 Sec-Alkyl Sulfonate (Sodium Petroleum Sulfonate).** The concentrations of Sodium Petroleum Sulfonate in two of the Windex Products “are estimated to be between 0 and 5%.” Fraiser Decl. ¶ 80 citing Exhibit 2. According to a study on human subjects, “between 1% and 5% alkyl olefin sulfonates [of which Sodium Petroleum Sulfonate is a type] were mild irritants.” Fraiser Decl. ¶ 81. Another study, conducted on humans over ten days with “0.8% Sodium Petroleum Sulfonate, study participants experienced increasing irritation as length of exposure increased and Sodium Petroleum Sulfonate (in a detergent formulation) was classified as a mild irritant in immersion studies (three 15-minute immersions done for up to 15 days).” Fraiser Decl. ¶ 82. These and other studies have shown that Sodium Petroleum Sulfonate “is a mild to moderate skin irritant at in-use concentrations, with reactions ranging from erythema (redness) to fissure formation (splitting of skin) accompanied by scaling.” Fraiser Decl. ¶ 83.

49. **Sodium Xylene Sulfonate.** The concentrations of Sodium Xylene Sulfonate in three of the Windex Products “are estimated to be less than 5%.” Fraiser Decl. ¶ 69 citing Exhibit 2. The scientific literature, including studies, “show mild-to-moderate skin irritation was observed in rabbits treated dermally with solutions containing xylene sulfonates, toluene sulfonates, and cumene sulfonates in solutions ranging from 1% to 60%.” *Id.* at ¶ 70. Sodium Xylene Sulfonate is thus “capable of causing mild to moderate skin irritant at in-use concentrations.” *Id.* at ¶ 71.

50. **2-(Hexyloxy)-Ethanol (Ethylene Glycol-N-Monoethyl Ether (“EGHE”))**. The concentrations of 2-(Hexyloxy)-Ethanol, in all four of the Windex Products, “are estimated to range from 0.05 to 5%.” Fraiser Decl. ¶ 55 citing Exhibit 2. A study “indicated that instillation of a 5% solution of 2-(Hexyloxy)-Ethanol into the eyes of rabbits caused severe injury, while a 1% solution caused minor injury.” Fraiser Decl. ¶ 56. 2-(Hexyloxy)-Ethanol therefore “causes eye injury at in-use concentrations.” Fraiser Decl. ¶ 57.

Consumers Are Charged a Price Premium for Defendant’s Deceptively Labeled Products

51. Defendant’s branding and packaging of the Products is designed to – and does – deceive and mislead consumers.

52. Defendant has sold more of the Products and at higher prices per unit than it would have in the absence of this misconduct, resulting in additional profits at the expense of consumers.

53. The marketing of the Products as “non-toxic” has a material bearing on price and consumer acceptance of the Products because consumers are willing to pay more for such Products.

54. The value of the Products that plaintiffs purchased and used was materially less than its value as represented by Defendant.

55. Had Plaintiffs and class members known the truth, they would not have bought the Products or would have paid less for them.

56. As a result of the false and misleading labeling, the Products are sold at a premium price of approximately \$0.15 per fluid ounce. In comparison, one of Defendant’s leading competitors’ products that does not have the false and misleading statements at issue here - Invisible Glass spray cleaner - sells at approximately \$0.12 per fluid ounce. Accordingly, Defendant’s Products sell for an approximate 20% price premium.

Jurisdiction and Venue

57. Jurisdiction is proper pursuant to 28 U.S.C. § 1332(d)(2) (Class Action Fairness Act of 2005 or “CAFA”).

58. Under CAFA, district courts have “original federal jurisdiction over class actions involving (1) an aggregate amount in controversy of at least \$5,000,000; and (2) minimal diversity[.]” *Gold v. New York Life Ins. Co.*, 730 F.3d 137, 141 (2d Cir. 2013).

59. Plaintiffs Carmen Rivera, Letisha Williams, Rosemary Vavitsas and Lisa Mack are citizens of New York.

60. Defendant S. C. Johnson & Son, Inc. is a Wisconsin corporation with a principal place of business in Racine, Racine County, Wisconsin and is a citizen of Wisconsin.

61. Venue is proper because plaintiff Rivera purchased the Product, became aware of the events or omissions giving rise to the claims and resides in this district. *See* 28 U.S.C. § 1391(b)(2).

62. Venue is supported because many class members reside in this District.

63. This court has personal jurisdiction over Defendant because it conducts and transacts business, contracts to supply and supplies goods within New York.

No Nexus to California

64. There is absolutely no nexus between the Plaintiffs and other proposed New York Class Members’ purchases and the State of California. The Plaintiffs and the other proposed New York Class Members are all New York residents, and all their purchases took place in the state of New York. California does not have jurisdiction over any of the claims of the Plaintiffs or other proposed New York Class Members, and any assertion to the contrary violates due process.

Parties

65. Plaintiff Carmen Rivera is a citizen of New York, New York County, New York.

66. Plaintiff Letisha Williams is a citizen of New York, Suffolk County, New York.

67. Plaintiff Rosemary Vavitsas is a citizen of New York, Queens County, New York.

68. Plaintiff Lisa Mack is a citizen of New York, Kings County, New York.

69. Defendant S. C. Johnson & Son, Inc. is a Wisconsin corporation with a principal place of business in Racine, Wisconsin, Racine County.

70. During the relevant statutes of limitations, plaintiffs purchased the Products within their districts and/or States for personal and household use in reliance on the representations the Products were non-toxic.

71. Plaintiff Carmen Rivera purchased the Windex Original Non-Toxic Formula several times during 2019, at stores including Duane Reade on Columbus Avenue on the Upper West Side of Manhattan.

72. Plaintiff Letisha Williams purchased the Windex Vinegar Non-Toxic Formula during 2019, including in early November 2019, at stores including Target, in Central Islip on Long Island.

73. Plaintiff Lisa Mack purchased Windex Ammonia-Free Non-Toxic Formula during 2019 and in or around May 2019 at Stop & Shop Supermarket, near Sheepshead Bay in Brooklyn.

74. Plaintiff Rosemary Vavitsas purchased the Windex Ammonia-Free Non-Toxic Formula during 2019 and in early 2020, at a Key Food Supermarket in Flushing in Queens.

75. Plaintiffs bought the Products because they wanted to avoid harm caused by harsh chemicals and understood non-toxic in the manner identified above.

76. Plaintiffs would buy the Products again if assured they did not contain components which were toxic and had the harsh physical and environmental effects they did.

Class Allegations

77. The class is defined as follows:

all New York residents who purchased any of the Products in the state of New York at any time from May 7, 2017 to the time of judgment (the “Class” or “New York Class”).

78. Excluded from the Class are officers and directors of Defendant, members of the immediate families of the officers and directors of Defendant, and their legal representatives, heirs, successors or assigns and any entity in which they have or have had a controlling interest.

79. Plaintiffs seek class-wide monetary relief based on Rule 23(b)(3).

80. Numerosity is met as it is anticipated there are, at a minimum, tens of thousands of proposed class members.

81. Common questions of law or fact predominate and include whether Defendant’s representations were likely to be misleading.

82. Plaintiffs’ claims and basis for relief are typical to other members because all were subjected to the same unfair and deceptive representations and actions.

83. Plaintiffs are adequate representatives because their interests do not conflict with other members.

84. No individual inquiry is necessary since the focus is only on defendant’s practices.

85. And a class action is superior to numerous individual actions.

86. Individual actions would risk inconsistent results, be repetitive and are impractical to justify, as the claims are modest relative to the scope of the harm.

87. Plaintiffs’ counsel is competent and experienced in complex class action litigation and intends to adequately and fairly protect class members’ interests.

First Cause of Action
Violation of New York GBL § 349
(On Behalf of Plaintiffs and the New York Class)

88. Plaintiffs incorporate by reference all preceding paragraphs.
89. New York General Business Law Section 349 (“GBL § 349”) declares unlawful “deceptive acts or practices in the conduct of any business, trade or commerce or in the furnishing of any service in this state....”
90. The conduct of Defendant alleged herein constitutes recurring, “unlawful” deceptive acts and practices in violation of GBL § 349. Defendant misleadingly, inaccurately, and deceptively presents its Products to consumers.
91. Defendant’s improper consumer-oriented conduct is misleading in a material way in that it, inter alia, induced Plaintiffs and other Class members to purchase and/or pay a premium for Defendant’s Products when they otherwise would not have.
92. Defendant made their untrue or misleading statements and representations willfully, wantonly, and with reckless disregard for the truth.
93. Plaintiffs and other Class members have been injured inasmuch as they paid a premium for the Product. Accordingly, Plaintiffs and other Class members received less than what they bargained or paid for.
94. Defendant’s deceptive and misleading practices constitute a deceptive act and practice in the conduct of business in violation of New York General Business Law §349(a) and Plaintiffs and other members of the Class have been damaged thereby.
95. As a result of Defendant’s recurring deceptive acts and practices, Plaintiffs and other Class members are entitled to monetary and compensatory damages, restitution and disgorgement of all moneys obtained by means of Defendant’s unlawful conduct, interest;

and attorneys' fees and costs. This includes actual damages under GBL § 349, as well as statutory damages of \$50 per unit purchased pursuant to GBL § 349.

Second Cause of Action
Violation of New York GBL § 349
(On Behalf of Plaintiffs and the New York Class)

96. Plaintiffs repeat and reallege each and every allegation contained in all the foregoing paragraphs as if fully set forth herein.
97. N.Y. Gen. Bus. Law§ 350 provides, in part, as follows:
- False advertising in the conduct of any business, trade or commerce or in the furnishing of any service in this state is hereby declared unlawful.
98. N.Y. Gen. Bus. Law§ 350a(1) provides, in part, as follows:
- The term 'false advertising, including labeling, of a commodity, or of the kind, character, terms or conditions of any employment opportunity if such advertising is misleading in a material respect. In determining whether any advertising is misleading, there shall be taken into account (among other things) not only representations made by statement, word, design, device, sound or any combination thereof, but also the extent to which the advertising fails to reveal facts material in the light of such representations with respect to the commodity or employment to which the advertising relates under the conditions proscribed in said advertisement, or under such conditions as are customary or usual ...
99. Defendant's labeling of the Products contains untrue and materially misleading "Non-Toxic Formula" representations.
100. Plaintiffs and Class Members have been injured inasmuch as they relied upon the false and deceptive representations and paid a premium for the Products.
101. Accordingly, Plaintiffs and Class Members received less than what they bargained or paid for.
102. Defendant's packaging and product labeling induced Plaintiffs and Class Members to buy Defendant's Products.
103. Defendant made the untrue and misleading statements and representations willfully,

wantonly, and with reckless disregard for the truth.

104. Defendant made the material misrepresentations described in this Second Amended Class Action Complaint on the Product's packaging and labeling.
105. Defendant's material misrepresentation was substantially uniform in content, presentation, and impact upon consumers at large.
106. Moreover, all consumers purchasing the Products were and continue to be exposed to Defendant's material misrepresentations.
107. As a result of Defendant's recurring, acts and practices in violation of GBL § 350, Plaintiffs and Class Members are entitled to monetary and compensatory damages, restitution and disgorgement of all moneys obtained by means of Defendant's unlawful conduct, interest, and attorneys' fees and costs as well as statutory damages of \$500 per unit purchased.

Jury Demand and Prayer for Relief

Plaintiffs demand a jury trial on all issues.

WHEREFORE, Plaintiffs pray for judgment:

1. Declaring this a proper class action, certifying plaintiffs as representatives of the New York Class and the undersigned as counsel for the New York Class;
2. Awarding monetary damages and interest pursuant to the New York statutory claims;
3. Awarding costs and expenses (including that for experts), and reasonable fees for plaintiffs' attorneys; and
4. Other and further relief as the Court deems just and proper.

Dated: March 31, 2022

Respectfully submitted,

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Proposed New York Class*

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

Carmen Rivera, Letisha Williams, Rosemary
Vavitsas, Lisa Mack, individually and on
behalf of all others similarly situated,

Plaintiff,

- against -

S.C. Johnson & Son, Inc.

Defendant

1:20-cv-03588-RA

DECLARATION OF LUCY FRAISER

Pursuant to 28 U.S.C. § 1746, I declare:

1. I am the principal of Lucy Fraiser Toxicology Consulting LLC, certified by the American Board of Toxicology, and have over 30 years of experience in toxicology and exposure assessment.

2. The American Board of Toxicology certification is a globally-recognized credential in toxicology that represents competency and commitment to human health and environmental sciences.

I. BACKGROUND

3. I have a bachelor's degree in Psychology and a PhD in Toxicology, both from the University of Texas at Austin.

4. During my career, I have acquired extensive experience with risk-based corrective action methodologies implemented by the U.S. Environmental Protection Agency (EPA) nationwide.

5. I have conducted and managed hundreds of multi-pathway human health risk assessments and/or risk-based evaluations in support of Resource Conservation Recovery Act

(RCRA) closures, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and state Risk-Based Corrective Action (RBCA) programs.

6. I have performed exposure assessments for chemicals used in pharmaceutical laboratories and industrial processes, chemicals applied to control pests and unwanted vegetation, and chemicals released as unwanted by-products of chemical and product manufacturing, combustion of fossil and waste-derived fuels, generation of electricity, petroleum refining, smelting, rock crushing, and activities at military installations.

7. I continuously monitor the evolution of the National Ambient Air Quality Standards (NAAQS) and the science supporting them.

8. I have testified before the Texas and Illinois State Legislatures, in public meetings, and before numerous state regulatory agencies on behalf of commercial clients.

9. I have provided testimony in civil and criminal proceedings, which has included “toxic tort” litigation on numerous occasions.

10. I have been qualified as an expert and have been deposed and testified in numerous cases as shown in Exhibit 1.

11. As part of my continuing education in this field, I regularly attend scientific meetings and conferences.

12. I also study published texts, periodicals, and scientific journals during the course of my work, which requires me to carry out comprehensive literature reviews to aid in activities such as interpretation of toxicity testing data, risk assessment and litigation support.

13. To maintain certification by the American Board of Toxicology, I am required to demonstrate active practice in toxicology on a recurring five-year basis.

14. This practice includes presentations to regulatory agencies, Congressional or other

national bodies; invited lectures on toxicology themes at universities, scientific meetings or symposia; presentation of posters; memberships in toxicology-related professional societies, expert working groups, trade or academic associations; experience in litigation, negotiation or similar activities.

15. Through the American Board of Toxicology certification and recertification process, I have demonstrated ongoing competence in many areas of toxicology, including design of animal studies and all steps of the risk assessment process, including hazard identification, exposure assessment, and dose response assessment, as well as applications in environmental and occupational health.

16. I have written articles for professional communications, including World Cement and Natural Gas & Electricity regarding the scientific bases for the ozone NAAQS.

17. In 2016, I wrote an article published by the Environmental Litigation Section of the American Bar Association, entitled, "In Chemical Litigation, Toxicology Fundamentals Matter."

18. This article discussed the ways that toxicologists can help build a case, focusing on the importance of toxicology principles in determining whether a chemical can cause a particular effect under a specific set of circumstances.

II. TOXICITY CONCEPTS

19. Central to the science of toxicology is the concept of understanding the hazardous properties (i.e., the toxicity) of chemicals, the exposure levels (dose) at which those hazardous properties are observed, and why (i.e., the mechanism by which effects are observed).

20. There are several important principals of toxicity.

21. First, there is a relationship between a toxic reaction (the response) and the amount of toxic agent received (the dose), hence, the dose (how much of an agent is required to produce a

particular reaction) is central to toxicity.

22. Second, all chemicals or substances are potentially hazardous and the deciding factor in whether they cause harm is the dose or level and the manner in which the exposure occurs.

23. Third, all chemicals tend to produce a specific, although not necessarily unique, pattern of biological effects.

III. NON-TOXIC CLEANING PRODUCTS

24. All cleaning products must be able to perform certain basic functions.

25. Hard surface and multi-surface cleaners have to dissolve dirt and grime, leave a surface shiny and do it without leaving streaks or films.

26. Most Windex® glass and multi-surface cleaners contain surfactants that surround dirt particles to loosen them from the surface they're attached to and solvent systems that create chemical reactions to dissolve dirt, fat, grease, or mineral compounds that adhere to the surface.¹

27. They also frequently have other ingredients, including fragrances, dyes, pH adjusters, builders that enhance the detergent power of the surfactant, wetting agents to help the product spread across surfaces, and hydrotropes, which are compounds that solubilize compounds that do not dissolve in water.²

IV. WINDEX NON-TOXIC PRODUCTS' COMPOSITION

28. I have reviewed the following information provided to me by Plaintiffs' Counsel: (1) available Safety Data Sheets ("SDS"), and (2) the ingredient lists of the cleaning products in question.

29. I have also reviewed toxicity studies in the published scientific literature, Cosmetic

¹ <https://www.windex.com/en-us/inspiration/more-about-windex/faq>.

² Cummings, Gerald (1993). Glass cleaning composition. European Patent No. EP 0 527 625 B1. European Patent Office. Glass cleaning composition - European Patent Office <https://patentimages.storage.googleapis.com>.

Ingredient Reviews (CIRs), Human and Environmental Risk Assessments (HERA) on ingredients in household cleaning products, European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC) reports, European Scientific Committee on Consumer Safety opinions, and regulatory documents.

30. None of the Windex® product mixtures themselves have been subjected to toxicity testing.

31. This is not unusual as comprehensive composition data for products in commerce are not generally available.

32. Deformulation or reverse engineering of chemical formulations typically involves separating different phases, each of which itself is a chemical mixture to be further analyzed. The challenge of separating, identifying, and quantifying individual components of formulations is especially difficult if the components that play key roles in the performance of a product are present at low concentrations.

33. Functional ingredients may be present at low concentrations compared to other ingredients, meaning that they may be difficult to detect. While traditional analytical techniques may provide some structural and compositional information, they may not be sufficient for deformulation of complex mixtures.

34. Manufacturers in the U.S. are not required to disclose weight fractions of specific ingredients in consumer products except in the case of active ingredients in certain products or in the case of chemicals with known health hazards covered by the Occupational Safety and Health Administration's (OSHA's) Hazard Communication Standard.³

35. In the absence of toxicity testing for the finished product, an understanding of

³ Isaacs, KK, Phillips, KA, Biryol, D, Dionisio, KL, and Price, PS. 2018. Consumer product chemical weight fractions from ingredient lists. *J Expo Sci Environ Epidemiol*, 28(3): 216–222.

chemicals contained in the Windex® products that consumers may contact, as well as their percentages by weight, becomes the necessary first step in determining whether the products are capable of harming consumers.

36. Ingredients contained in the Windex® products at issue in this case can be found at <https://www.whatsinsidescjohnson.com/us/en/brands/windex/> by clicking on the individual products.

37. Ingredients in Windex® Cleaner Original, Windex® Cleaner Vinegar, and Windex Cleaner® Crystal Rain® – Ammonia Free, and Windex® Multi-Surface Cleaner are as follows.

Windex Original Glass Cleaner

- 2-Hexoxyethanol
- Isopropanolamine
- Ammonium Hydroxide
- Sodium C10-16 Alkylbenzenesulfonate
- Sodium Xylene Sulfonate
- Methylpropional
- Citronellol
- Citrus Aurantium Dulcis Peel Oil
- Hexyl Cinnamal
- Linalool
- Terpineol

Windex Vinegar Cleaner

- 2-Hexoxyethanol
- Propylene Glycol
- Acetic Acid
- Lactic Acid
- Linalool
- Linalyl Acetate

Windex Multi-Surface Cleaner

- 2-Hexoxyethanol
- Propylene Glycol
- Sodium Hydroxide
- Sodium C10-16 Alkylbenzenesulfonate
- Sodium Xylene Sulfonate
- Sodium Petroleum Sulfonate
- Linalool
- Linalyl Acetate

Windex Crystal Rain (Ammonia-Free)

- 2-Hexoxyethanol
- Isopropanolamine
- Sodium C10-16 Alkylbenzenesulfonate
- Sodium Xylene Sulfonate
- Benzyl Benzoate
- Lauramine Oxide
- Sodium Hydroxide
- 4-Tert-Butylcyclohexyl Acetate
- Butylphenyl Methylpropional
- C11-15 Sec-Pareth-12
- Hexamethylindanopyran
- Hexyl Cinnamal
- Tetramethyl Acetyloctahydronaphthalenes

38. SC Johnson does not list the concentrations of any ingredient contained in its Windex® products at the <https://www.whatsinsidescjohnson.com/us/en/brands/windex/> website.

39. Many consumer products have reported ingredient lists that are constructed using specific guidelines, such as those used to develop Safety Data Sheets (SDS), which are intended to provide information about the hazards posed by a substance or product.

40. Only one of the SDSs for the Windex® products at issue in this case (Windex® Cleaner Vinegar⁴) lists any ingredients or ingredient concentrations.

41. The SDSs for Windex® Cleaner Original, and Windex Cleaner® Crystal Rain® – Ammonia Free state that “This product does not meet the criteria for classification in any hazard class according to regulation OSHA 29 CFR 1910.1200”.

42. The SDS for Windex® Multi-Surface Cleaner states “This product does not meet the criteria for classification in any hazard class according to the Canadian Hazardous Products Regulation”.

43. If no toxicity data are available for a product or a substantially similar mixture, the hazard, for purposes of including in a SDS, is generally determined based on available toxicity data for the individual ingredients using cut-off values/concentration limits.⁵

44. Not all ingredients in a product are required to be listed on its SDS.

45. Regulations define substances and concentrations that must be listed.⁶

46. Usually, an ingredient must be disclosed on a SDS if it meets the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) classification criteria as a hazardous substance and its content exceeds relevant cut-off value, or if it presents a health

⁴ Windex Vinegar SDS. <https://msdsdigital.com/windex%C2%AE-multisurface-cleaner-vinegar-msds>.

⁵ GHS Classification of Mixture. http://www.chemsafetypro.com/Topics/GHS/GHS_classification_mixture.html.

⁶ Gerster, FM, Vernez, D, Wildl, PP, Hopf, NB. 2014. Hazardous substances in frequently used professional cleaning products. Inter J Occup Environ Health VOL. 20(1): 46-60.

hazard below the cut-off value.⁷

47. For example, a skin irritant need not be disclosed in a SDS unless its concentration is equal to or greater than 1% to 5%, depending on whether it is considered to be a skin corrosive (Category 1) or a skin irritant (Category 2 or 3).⁸

48. In the absence of chemical ingredient and weight fraction information from the supplier or from SDSs, quantitative patent-based information has historically been used to estimate ranges of ingredient compositions⁹ and has been used to estimate the range of ingredient concentrations in Windex[®] products in this case.

49. We defined "In-use concentrations" as the concentration or percentage by weight of the ingredient in the Products.

50. Two Patents for glass cleaners with enhanced anti-streaking properties¹⁰ owned by SC Johnson were used primarily to estimate in-use concentrations in Windex[®] products, although an older SC Johnson glass cleaner¹¹ patent was also consulted.

51. Exhibit 2 is comprised of a Windex[®] product ingredient summary table that indicates which Windex[®] products contain specific ingredients and estimates of the ranges of individual chemicals contained in the Windex[®] products based on the aforementioned SC Johnson patents.

⁷ OSHA Brief. 2012. Hazard Communication Standard: Safety Data Sheets. DSG BR-3514 2/2012. <https://www.osha.gov/hazcom/guidance>.

⁸ GHS Cut-off Value and GHS Concentration Limit http://www.chemsafetypro.com/Topics/GHS/GHS_cut_off_value_GHS_concentration_limit.html.

⁹ Isaacs, KK, Phillips, KA, Biryol, D, Dionisio, KL, and Price, PS. 2018. Consumer product chemical weight fractions from ingredient lists. *J Expo Sci Environ Epidemiol*, 28(3): 216–222.

¹⁰ Cummings, Gerald (1993). Glass cleaning composition. European Patent No. EP 0 527 625 B1. European Patent Office. Glass cleaning composition - European Patent Office <https://patentimages.storage.googleapis.com>; Neumiller; Philip J. and Ziemelis, Shelly M. (1998). Glass cleaner with enhanced anti-streaking properties. U.S. Patent No. 5,849,681. U.S. Patent Office. <https://patents.google.com/patent/US5849681A/en>.

¹¹ Stonebraker, Melvin E. and Wise, Samuel P. (1969). Glass cleaning composition. U.S. Patent No. 3,463,735. U.S. Patent Office. <https://patents.google.com/patent/US3463735A/en>.

V. THE INGREDIENTS IN THE PRODUCT ARE CAPABLE OF CAUSING HARM TO HUMANS, ANIMALS AND THE ENVIRONMENT

52. Based on a review of the scientific literature, the Products contain ingredients that are capable of causing, and have caused, harm to humans, animals, and the environment.

53. Exhibit 3 is a summary of acute health effects associated with ingredients in the Windex® products and the concentrations at which those acute health effects have been observed in toxicology (animal) and clinical (human) studies.

54. 2-(Hexyloxy)-Ethanol (Ethylene Glycol-N-Monoethyl Ether (“EGHE) is present in all four Windex® products at issue in this case.

55. 2-(Hexyloxy)-Ethanol concentrations in Windex® products are estimated to range from 0.05 to 5% (see Exhibit 2 for details).

56. One study indicated that instillation of a 5% solution of 2-(Hexyloxy)-Ethanol into the eyes of rabbits caused severe injury, while a 1% solution caused minor injury.¹²

57. Based on this information, 2-(Hexyloxy)-Ethanol causes eye injury at in-use concentrations

58. Fragrances are present in all four Windex® products at issue in this case.

59. Fragrance concentrations in Windex® products are estimated to range from 0.001 to 1% (see Exhibit 2 for details).

60. The fragrance ingredients contained in the Windex® products at issue in this case for which studies were located in the scientific literature include: 4-tert-butylcyclohexyl acetate; 4-(4-Hydroxy-4-Methylpentyl)Cyclohex-3-Enecarbaldehyde or Lyrall; Benzyl Benzoate; Citronellol; and Geraniol.

¹² ECETOC. 2005. European Centre for Ecotoxicology and Toxicology of Chemicals. Technical Report No. 95. The Toxicology of Glycol Ethers and its Relevance to Man (Fourth Edition), Volume II-Substance Profiles. ISSN-0773-8072-95, Brussels, February.

61. Studies show that 0.1 ml of 0.625% 4-tert-butylcyclohexyl acetate caused slight conjunctival irritation with chemosis (eyelid looks like it has fluid in it or like a blister) and discharge in rabbits (cleared by day 4).¹³

62. It was reported that skin exposure of humans to the fragrance Lyrall (4-(4-Hydroxy-4-Methylpentyl) Cyclohex-3-Enecarbaldehyde) is associated with contact allergy at concentrations as low as 1% (1% of human test subjects had a positive skin patch test reaction to 1% Lyrall).¹⁴

63. At concentrations ranging between 1% and 10%, reports have shown weak skin sensitization in humans to Benzyl Benzoate.¹⁵

64. Skin exposure to Citronellol (in petrolatum) at a concentration ranging from 0.5% to 1% caused positive skin patch test reactions in a small percentage of human test subjects (0.12% and 0.2%, respectively).

65. A single application of Citronellol (0.5 ml of 1%) to intact and abraded skin caused slight erythema (reddening of skin) in 66% of rabbits at 24 hours (cleared by 72 hours), and installation of 0.1 ml of a 1% solution of Citronellol (in propylene glycol) into the eye caused temporary mild conjunctival reactions in 5 out of 6 animals.¹⁶

66. A 1% solution of Geraniol in petrolatum caused positive skin patch test reactions in 6.6% to 8.4% of human test subjects.¹⁷

¹³ 8. Belsito, D, et al. 2008. A toxicologic and dermatologic assessment of cyclic acetates when used as fragrance ingredients. *Food and Chemical Toxicology*, 46, S1–S27.

¹⁴ SCCS. 2012. European Scientific Committee on Consumer Safety. Opinion on Hydroxyisohexyl 3-Cyclohexene Carboxaldehyde (HICC). SCCP/1456/11.

¹⁵ CIR. 2017. Cosmetic Ingredient Review. Safety Assessment of Benzyl Alcohol, Benzoic Acid and its Salts, and Benzyl Benzoate as Used in Cosmetics.

¹⁶ D. Belsito, D. Bickers, M. Bruze, P. Calow, et al. 2008. A toxicologic and dermatologic assessment of cyclic and non-cyclic terpene alcohols when used as fragrance ingredients. *Food and Chemical Toxicology*, 46, S1–S71.

¹⁷ D. Belsito, D. Bickers, M. Bruze, P. Calow, et al. 2008. A toxicologic and dermatologic assessment of cyclic and non-cyclic terpene alcohols when used as fragrance ingredients. *Food and Chemical Toxicology*, 46, S1–S71.

67. Based on this information, fragrances in Windex® products are capable of causing, and have caused, skin irritation, contact dermatitis, and eye irritation at in-use concentrations.

68. Sodium Xylene Sulfonate is present in three of the Windex® products at issue in this case.

69. Sodium Xylene Sulfonate concentrations in Windex® products are estimated to be less than 5% (see Exhibit 2 for details).

70. Studies show mild-to-moderate skin irritation was observed in rabbits treated dermally with solutions containing xylene sulfonates, toluene sulfonates, and cumene sulfonates in solutions ranging from 1% to 60%.¹⁸

71. Based on this information, Sodium Xylene Sulfonate is capable of causing mild to moderate skin irritant at in-use concentrations.

72. Isopropanolamine (IPA) is present in two of the Windex® products at issue.

73. IPA concentrations in Windex® products are estimated to be between 0 and 2% (see Exhibit 2 for details).

74. A study showed that instillation of 0.1 ml of a 1% aqueous solution of IPA into the conjunctival sac of one eye of New Zealand white rabbits caused slight to moderate conjunctival redness in all rabbits that was gone within 72 hours.¹⁹

75. Based on this information, IPA is capable of causing slight to moderate conjunctivitis (pink eye) at in-use concentrations.

76. Propylene Glycol is present in two of the Windex® products at issue.

77. Propylene Glycol concentrations in Windex® products are estimated to be between

¹⁸ Bergfield, WF, Belsito, DV, Klaassen, CD, Hill, R, et al. 2012. Safety Assessment of Xylene Sulfonic Acid, Toluene Sulfonic Acid, and Alkyl Aryl Sulfonate Hydrotropes as Used in Cosmetics. *Inter J Toxicol*, 30(Supplement 3): 270S-283S.

¹⁹ CIR. 1987. Cosmetic Ingredient Review. Final Report on the Safety Assessment of Diisopropanolamine, Triisopropanolamine, Isopropanolamine, and Mixed Isopropanolamine. *Journal of The American College of Toxicology*, 6(1): 53-76.

0 and 10% (see Exhibit 2 for details).

78. In females with chronic venous insufficiency, 8.3% were sensitized to 5% Propylene Glycol, while 5% Propylene Glycol via skin patch test in patients with contact dermatitis did not cause any test subjects to become sensitized.²⁰

79. Sodium C14-17 Sec-Alkyl Sulfonate (Sodium Petroleum Sulfonate) is present in two of the Windex® products at issue.

80. Sodium Petroleum Sulfonate concentrations in Windex® products are estimated to be between 0 and 5% (see Exhibit 2 for details).

81. One human study demonstrated that 1% and 5% alkyl olefin sulfonates were mild irritants.

82. In a 10-day occlusive patch test with 0.8% Sodium Petroleum Sulfonate, study participants experienced increasing irritation as length of exposure increased and Sodium Petroleum Sulfonate (in a detergent formulation) was classified as a mild irritant in immersion studies (three 15-minute immersions done for up to 15 days).²¹

83. Based on this information, Sodium Petroleum Sulfonates is a mild to moderate skin irritant at in-use concentrations, with reactions ranging from erythema (redness) to fissure formation (splitting of skin) accompanied by scaling.

84. Sodium Hydroxide is present in two of the Windex® products at issue.

85. Sodium Hydroxide concentrations in Windex® products are estimated to be between 0.01 to 2% (see Exhibit 2 for details).

86. In humans, Sodium Hydroxide has been shown to be an irritant at concentrations as

²⁰ CIR. 2012. Cosmetic Ingredient Review. Safety Assessment of Propylene Glycol, Tripropylene Glycol, and PPGs as Used in Cosmetics. *International Journal of Toxicology*, 31(Supplement 2) 245S-260S.

²¹ CIR. 2013. Cosmetic Ingredient Review. Re-Review of Sodium α -Olefin Sulfonates as Used in Cosmetics.

low as 0.5%.²²

87. Lauryl Dimethyl Amine Oxide (Lauramine Oxide) is present in two of the Windex® products at issue.

88. Lauramine Oxide concentrations in Windex® products are estimated to range from 0 to 5% (see Exhibit 2 for details).

89. In one study, Lauramine Oxide concentrations of 0.3% caused slight to moderate erythema (redness) with slight edema (swelling), fissuring (splitting/cracking), and slight to moderate epithelial desquamation.

90. Clinical data (in humans) showed dermal exposure to 3.7% Lauramine Oxide to be a mild irritant, with a slight potential for mild cumulative skin irritation at concentrations as low as 2%.²³

91. Based on this information, Lauramine Oxide is a mild skin irritant, with potential for mild cumulative irritation at in-use concentrations.

92. Lactic Acid is present in one of the Windex® products at issue.

93. Lactic Acid concentrations in Windex® products are estimated to range from 0.0001 – 0.1% (See Exhibit 2 for details).

94. A facial freshener and a facial cleanser containing 0.1% and 0.15% sodium lactate applied 5 days/week for a total of 20 applications to the back of clipped New Zealand White rabbits induced slight erythema (redness), desquamation (peeling of skin), and some drying of the skin.²⁴

95. Based on this information, Lactic Acid causes redness, skin peeling, and drying of

²² 13.CIR. 2015. Cosmetic Ingredient Review. Safety Assessment of Inorganic Hydroxides as Used in Cosmetics.

²³ CIR. 1994. Cosmetic Ingredient Review. Final Report on the Safety Assessment of Lauramine Oxide and Stearamine Oxide. *J Am Col Toxicol*, 13(3):231-245.

²⁴ CIR. 1998. Cosmetic Ingredient Review. Final Report on The Safety Assessment of Glycolic Acid, Ammonium, Calcium, Potassium, And Sodium Glycolates, Methyl, Ethyl, Propyl, And Butyl Glycolates, And Lactic Acid, Ammonium, Calcium, Potassium, Sodium, And Tea-Lactates, Methyl, Ethyl, Isopropyl, and Buty-L Lactates, and Lauryl, Myristyl, and Cetyl Lactates.

the skin at in-use concentrations.

96. Acetic Acid is present in one of the Windex® products at issue.

97. Acetic Acid concentrations in Windex® products are estimated to range from 0.01 - 10% (See Exhibit 2 for details).

98. Acetic Acid is considered to be a minor skin irritant in animal studies, but at high concentrations (10%), it is an irritant.

99. 5% Acetic Acid has been labeled a severe ocular irritant in rabbits and 10% Acetic Acid is a skin irritant.

100. Acetic acid at concentrations greater than 10% caused severe permanent eye injury in rabbits, while a 5% solution (equivalent to vinegar) caused severe, but reversible (two-week recovery), eye injury.²⁵

101. Based on this information, Acetic Acid is a severe ocular irritant and a minor skin irritant at in-use concentrations.

VI. THE PRODUCTS ARE CAPABLE OF CAUSING HARM TO HUMANS, ANIMALS AND THE ENVIRONMENT

102. Window cleaner poisonings have occurred when people have swallowed or breathed large amounts of window cleaner.

103. Some of these cases have been accidents, while others were intentional.²⁶

104. The Missouri Poison Center states that “Glass cleaning products like Windex® contain solvents, surfactants, and ammonia to clean glass surfaces. Some products also contain fragrances and dyes. Small ingestions can cause minor mouth and throat irritation, stomach upset, and vomiting. Brief contact with the skin can cause minor redness and irritation. Airborne mist

²⁵ CIR. 2012. Cosmetic Ingredient Review. Final Report of the Cosmetic Ingredient Review Expert Panel on the Safety Assessment of Methyl Acetate. *Inter J Toxicol*, 31 (Supplement 1):112S-136S.

²⁶ Window Cleaner Poisoning. <http://se3.adam.com/content.aspx?productid=117&pid=1&gid=002750>.

from the spray can irritate the eyes, nose, and throat.”²⁷

105. In an investigation of ocular exposures associated with household cleaning products in the U.S. (January 2000 through December 2016), Kamboj and colleagues reported that poison control centers received 319,508 calls for household cleaning product-related ocular exposures, averaging 18,795 exposures annually.

106. Although information on the specific brand of household cleaners involved was not provided (Poison Control Centers will not provide product-specific information without express approval of the manufacturer),²⁸ they reported that glass cleaners made up 5.3% of the eye exposure poison control center calls and were amongst the product subcategories most commonly associated with ocular exposures.²⁹

107. Although this study reported a significant decrease in poison control center calls regarding glass cleaners from 2000 to 2016, the number of calls remained high and clearly indicates that accidental exposures of the eye and adverse effects do occur with glass cleaners.

108. Another study indicated that products stored in spray-bottles were the source of exposure in 40.1% of household cleaning product-related injuries treated in U.S. Emergency Departments between 1990 and 2006 and that the patient’s eyes were 13.74 times (95% CI: 10.67–17.69 times) more likely to be injured than all other body parts.³⁰

109. Webpoisoncontrol.org is an online tool designed to help individuals that have come into contact with a potentially poisonous substance determine whether it is safe to stay home, or if a call to the Poison Control Center or a visit to an emergency room is required.

²⁷ Glass Cleaner. Quick Facts About Glass Cleaner. <https://missouripoisoncenter.org/glass-cleaner/>.

²⁸ Personal communication with the American Association of Poison Control Centers (AAPCC) at datarequests@aapcc.org on October 19, 2021.

²⁹ Kamboj, A, Spiller, HA, Casavant, MJ, Kistamgari, S, et al. 2020. Household cleaning product-related ocular exposures reported to the United States poison control centres. *Eye*, 34:1631–1639.

³⁰ McKenzie, LB, Ahir, N, Stolz, U, and Nelson, NG. 2010. Household Cleaning Product-Related Injuries Treated in US Emergency Departments in 1990 –2006. *Pediatrics*, 126(3):509-516.

110. Webpoisoncontrol.org lists a variety of actions to be taken in the event that ocular exposure to Windex® Original Cleaner, Multi-Surface Cleaner, Cleaner with Vinegar, and Ammonia-Free Cleaner occurs.

111. This suggests that ocular exposures to Windex® products has occurred and that Poison Control Centers have been contacted for advice on potential poisonings associated with these products.

112. According to ourfitpets.com, Windex® can be toxic to dogs.

113. According to this site, symptoms of Windex® poisoning include but are not limited to: (1) red/raw skin, blistering of the skin; (2) pain; (3) pawing at the mouth; (4) excessive drooling; (5) loss of appetite; (6) fever; and (7) pawing at eyes or tearing.

114. These symptoms are consistent with toxicity data on Windex® ingredients.

115. The ourfitpets.com article titled “My Dog Drank Windex What Should I Do?” indicates that a dog drinking Windex® is a “Medical Emergency” and states that even a small amount of Windex® can make a dog very sick.³¹

116. A Dog’s Life blog³² lists household cleaners, including Windex®, as number 8 in the top 10 poisons for dogs.

117. The blog states that “Common substances like bleach, floor cleaners and Windex are a leading cause of pet poisoning, resulting in stomach and respiratory tract problems.”

³¹ Our Fit Pets. My Dog Drank Windex What Should I Do? At <https://ourfitpets.com/health/digestive-system/my-dog-drank-windex-what-should-i-do/>.

³² A Dog’s Life Blog. Top 10 Poisons for Your Dog. <http://ak9slife.blogspot.com/2010/09/top-10-poisons-for-your-dog.html>.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 28 , 2021.



Lucy Fraiser, PhD, DABT