

SECTION 1: Identification

1.1 Product Identifiers

- 1.1.1 Product Name: CDA 12A, 200 Proof
- 1.1.2 Part Number: IA-200-CDA12A
- 1.1.3 CAS Number: 64-17-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

- 1.2.1 Identified Uses: Solvent
- 1.2.2 Restrictions: Uses other than the recommended use of this substance

1.3 Details of the Supplier of the Safety Data Sheet

- 1.3.1 Company: Ultrapure Kentucky 6800 Enterprise Dr Louisville, KY 40214
 - 1.3.2 Telephone: 502-654-8752
 - 1.3.3 CHEMTREC (USA): 800-424-9300 (206300)
 - 1.3.4 CHEMTREC (Outside of USA): 703-527-3887 CHEMTREC
- 24 Hours/day; 7 Days/week

SECTION 2: Hazards Identification

2.1 Classification of the Substance or Mixture

- 2.1.1 GHS Class: Physical hazards: Flammable liquids, Category 2
- 2.1.2 GHS Class: Health hazards: Serious eye damage/eye irritation, Category 2
- 2.1.3 GHS Class: Health hazards: Reproductive toxicity, Category 2
- 2.1.4 GHS Class: Health hazards: Specific target organ toxicity, repeated exposure, Category 2 (auditory organs, central nervous system)
- 2.1.5 GHS Class: Environmental hazards: Hazardous to the aquatic environment, acute hazard, Category 3
- 2.1.6 GHS Class: OSHA defined hazards: Not classified.

2.2 GHS Label elements, including precautionary statements

2.2.1 Pictogram:



2.2.2 Signal Word: Danger

2.2.3 Hazard Statements

- 2.2.3.1 Highly flammable liquid and vapor.
- 2.2.3.2 Causes serious eye irritation.
- 2.2.3.3 Suspected of damaging fertility or the unborn child.
- 2.2.3.4 May cause damage to organs (auditory organs, central nervous system) through prolonged or repeated exposure.
- 2.2.3.5 Harmful to aquatic life.

2.2.4 Precautionary Statements

- 2.2.4.1 Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
- 2.2.4.2 Response: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.

2.2.4.3 Storage: Store in a well-ventilated place. Keep cool. Store locked up.

2.2.4.4 Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Hazards not otherwise classified (HNOC): None known.

2.4 Supplemental Information: None.

SECTION 3: Composition/Information on Ingredients

3.1 Product Mixture

3.1.1 Synonyms: N/A

3.1.2 Formula: Completely Denatured Alcohol 12A

3.1.3 Molecular Weight: N/A

3.1.4 CAS Number: Mixture

3.2 Mixtures

Chemical Name	CAS Number	Ingredient Percent by Weight
Ethyl alcohol	64-17-5	95.24
Toluene	108-88-3	4.76
There are no additional hazardous ingredients greater than or equal to 1.0 weight percent concentration or carcinogenic ingredients greater than or equal to 0.1% weight percent concentration.		

3.3 Composition Comments

3.3.1 All concentrations are in percent by weight unless otherwise indicated.

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

4.1.1 General advice: Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

4.1.2 If inhaled: Move to fresh air. Call a physician if symptoms develop or persist.

4.1.3 In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

4.1.4 In case of eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

4.1.5 If swallowed: Rinse mouth. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed: Narcosis. Headache. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. Prolonged exposure may cause chronic effects.

4.3 Indication of any immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

5.1.1 Suitable Extinguishing Media

5.1.1.1 Water fog. Alcohol resistant foam.

5.1.1.2 Dry chemical powder.

5.1.1.3 Carbon dioxide (CO2).

5.1.2 Unsuitable Extinguishing Media

5.1.2.1 Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special Hazards Arising from the Substance or Mixture

- 5.2.1 Vapors may form explosive mixtures with air.
- 5.2.2 Vapors may travel considerable distance to a source of ignition and flash back.
- 5.2.3 During fire, gases hazardous to health may be formed.
- 5.2.4 Combustion products may include: carbon oxides.
- 5.2.5 Highly flammable liquid and vapor.
- 5.2.6

5.3 Advice for Firefighters

- 5.3.1 Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool.

5.4 Further Information

- 5.4.1 Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

- 6.1.1 Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

6.2 Environmental Precautions

- 6.2.1 Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and Materials for Containment and Cleaning Up

- 6.3.1 Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. The product is completely soluble in water. Prevent product from entering drains. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

6.4 Reference to other Sections

- 6.4.1 For disposal see Section 13.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

7.1.1 Advice on Protection Against Fire and Explosion

- 7.1.1.1 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment.
- 7.1.1.2 Avoid contact with eyes. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid release to the environment.

7.1.2 Hygiene Measures

- 7.1.2.1 Observe good industrial hygiene practices. Observe any medical surveillance requirements. When using do not smoke.

7.1.2.2 Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.

7.1.2.3 Routinely wash work clothing and protective equipment to remove contaminants.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

7.2.1 Storage Conditions

7.2.1.1 Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques.

7.2.1.2 Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place.

7.2.1.3 Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

8.1.1 Ingredients with Workplace Control Parameters

Chemical Name	CAS Number	Type	Value
Ethyl alcohol	64-17-5	PEL (OSHA)	1900 mg/m3 1000 ppm
Toluene	108-88-3	Ceiling (OSHA)	300 ppm
Toluene	108-88-3	TWA (OSHA)	200 ppm
Ethyl alcohol	64-17-5	STEL (ACGIH)	1000 ppm
Toluene	108-88-3	TWA (ACGIH)	20 ppm
Ethyl alcohol	64-17-5	TWA (NIOSH)	1900 mg/m3 1000 ppm
Toluene	108-88-3	STEL (NIOSH)	560 mg/m3 150 ppm
Toluene	108-88-3	TWA (NIOSH)	375 mg/m3 100 ppm

8.1.2 Biological Limit Values (ACGIH Biological Exposure Indices)

8.1.2.1 Toluene (CAS 108-88-3): 0.3 mg/g — Determinant: o-Cresol, with hydrolysis — Specimen: Creatinine in urine — Sampling Time: *

8.1.2.2 Toluene (CAS 108-88-3): 0.03 mg/l — Determinant: Toluene — Specimen: Urine — Sampling Time: *

8.1.2.3 Toluene (CAS 108-88-3): 0.02 mg/l — Determinant: Toluene — Specimen: Blood — Sampling Time: *

8.1.2.4 * - For sampling details, please see the source document.

8.1.3 Exposure Guidelines

8.1.3.1 US - California OELs: Skin designation: Toluene (CAS 108-88-3) Can be absorbed through the skin.

8.1.3.2 US - Minnesota Haz Subs: Skin designation applies: Toluene (CAS 108-88-3) Skin designation applies.

8.2 Exposure Controls

8.2.1 Appropriate Engineering Controls

8.2.1.1 Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.2.1.2 Provide eyewash station and safety shower.

8.2.2 Personal Protective Equipment

8.2.2.1 Eye/Face Protection Required

8.2.2.1.1 Chemical goggles are recommended.

8.2.2.2 Skin Protection Required

8.2.2.2.1 Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

8.2.2.3 Body Protection

8.2.2.3.1 Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

8.2.2.4 Respiratory Protection

8.2.2.4.1 If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Chemical respirator with organic vapor cartridge.

8.2.2.5 Control of Environmental Exposure

8.2.2.5.1 N/A

8.2.2.6 Thermal Hazards

8.2.2.6.1 Wear appropriate thermal protective clothing, when necessary.

SECTION 9: Physical and Chemical Properties**9.1 Information on Basic Physical and Chemical Properties**

- 9.1.1 Physical State: Liquid.
- 9.1.2 Form: Liquid.
- 9.1.3 Color: Clear liquid; invisible vapor.
- 9.1.4 Odor: Not available.
- 9.1.5 Odor Threshold: Not available.
- 9.1.6 pH: Not available.
- 9.1.7 Melting Point/Freezing Point: -67 °F (-55 °C)
- 9.1.8 Boiling Point/Boiling Range: 176 °F (80 °C) at 760 mmHg
- 9.1.9 Flash Point: 55.4 °F (13.0 °C) Closed Cup
- 9.1.10 Evaporation Rate: 3.3 (butyl acetate = 1)
- 9.1.11 Flammability: Not applicable.
- 9.1.12 Upper Explosion Limit (UEL): 19 % v/v (for 100% ethyl alcohol)
- 9.1.13 Lower Explosion Limit (LEL): 3.3 % v/v (for 100% ethyl alcohol)
- 9.1.14 Vapor Pressure: 59.5 mm Hg (for 100% ethyl alcohol) (68 °F (20 °C))
- 9.1.15 Vapor Pressure Temperature: 68 °F (20 °C)
- 9.1.16 Vapor Density: 1.6 (air = 1)
- 9.1.17 Density: [NOT IN SOURCE — confirm] (source reports relative density only)
- 9.1.18 Relative Density: 6.61 lb/gal (60 °F (15.56 °C))
- 9.1.19 Relative Density Temperature: 60 °F (15.56 °C)
- 9.1.20 Water Solubility: Completely soluble.
- 9.1.21 Partition Coefficient (n-octanol/water): Not available.
- 9.1.22 Autoignition Temperature: 685.4 °F (363 °C) (for 100% ethyl alcohol)
- 9.1.23 Decomposition Temperature: Not available.
- 9.1.24 Viscosity: Not available.
- 9.1.25 Explosive Properties: Not explosive.
- 9.1.26 Oxidizing Properties: Not oxidizing.

9.2 Other safety information

9.2.1 N/A

SECTION 10: Stability and Reactivity**10.1 Reactivity**

10.1.1 The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical Stability

10.2.1 Material is stable under normal conditions.

10.3 Possibility of Hazardous Reactions

10.3.1 No dangerous reaction known under conditions of normal use.

10.4 Conditions to Avoid

10.4.1 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

10.5 Incompatible Materials

10.5.1 Strong oxidizing agents.

10.6 Hazardous Decomposition Products

10.6.1 No hazardous decomposition products are known.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

11.1.1 Mixture

11.1.1.1 Acute toxicity Not expected to be acutely toxic.

11.1.1.1.1 Oral: Expected to be a low ingestion hazard.

11.1.1.1.2 Symptoms: Narcosis. Headache. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

11.1.1.1.3 Dermal: Causes mild skin irritation.

11.1.1.2 Skin Corrosion/Irritation: Causes mild skin irritation.

11.1.1.3 Serious Eye Damage/Eye Irritation: Causes serious eye irritation.

11.1.1.4 Respiratory or Skin Sensitization: Respiratory sensitization: Not a respiratory sensitizer. Skin sensitization: This product is not expected to cause skin sensitization.

11.1.1.5 Germ Cell Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

11.1.1.6 Carcinogenicity : Not classifiable as to carcinogenicity to humans.

11.1.1.6.1 IARC: IARC Monographs. Overall Evaluation of Carcinogenicity: Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

11.1.1.6.2 NTP: NTP Report on Carcinogens: Not listed.

11.1.1.6.3 OSHA: OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053): Not regulated.

11.1.1.7 Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

11.1.1.8 Specific Target Organ Toxicity - Single Exposure: Not classified.

11.1.1.9 Specific Target Organ Toxicity - Repeated Exposure: May cause damage to organs (auditory organs, central nervous system) through prolonged or repeated exposure.

11.1.1.10 Aspiration Hazard: Not an aspiration hazard.

11.2 Additional Information

11.2.1 Information on likely routes of exposure — Inhalation: Prolonged inhalation may be harmful. Skin contact: Causes mild skin irritation. Eye contact: Causes serious eye irritation. Ingestion: Expected to be a low ingestion hazard. Chronic effects: May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

11.2.2 Component Acute Toxicity

Component	Route	Species	Result
Ethyl alcohol (CAS 64-17-5)	Inhalation Vapor	Rat	Acute LC50 117 - 125 mg/l, 4 Hours
Ethyl alcohol (CAS 64-17-5)	Oral	Rat	LD50 10470 mg/kg
Toluene (CAS 108-88-3)	Dermal	Rabbit	Acute LD50 12200 mg/kg
Toluene (CAS 108-88-3)	Inhalation Vapor	Rat	LC50 28.1 mg/l, 4 Hours

SECTION 12: Ecological Information

12.1 Toxicity

12.1.1 Mixture: Harmful to aquatic life.

12.2 Persistence and Degradability: No data is available on the degradability of this product.

12.3 Bioaccumulative Potential: Partition coefficient n-octanol / water (log Kow): Toluene (CAS 108-88-3) 2.73

12.4 Mobility in Soil: The product is completely soluble in water.

12.5 Results of PBT and vPvB Assessment

12.5.1 N/A

12.6 Endocrine Disrupting Properties: N/A

12.7 Other Adverse Effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

12.8 Component Ecotoxicity

Component	Species	Test Type	Result
Ethyl alcohol (CAS 64-17-5)	Freshwater algae	Aquatic Algae EC10	11.5 mg/l, 72 hours
Ethyl alcohol (CAS 64-17-5)	Freshwater algae	Aquatic Algae EC50	275 mg/l, 72 hours
Ethyl alcohol (CAS 64-17-5)	Marine water algae	Aquatic Algae EC50	1900 mg/l
Ethyl alcohol (CAS 64-17-5)	Marine water algae	Aquatic Algae NOEC	1580 mg/l
Ethyl alcohol (CAS 64-17-5)	Freshwater fish	Aquatic Fish LC50	11200 mg/l, 24 hours
Ethyl alcohol (CAS 64-17-5)	Freshwater fish	Aquatic Fish NOEC	250 mg/l
Ethyl alcohol (CAS 64-17-5)	Freshwater invertebrate	Aquatic Invertebrate EC50	5012 mg/l, 48 hours
Ethyl alcohol (CAS 64-17-5)	Marine water invertebrate	Aquatic Invertebrate EC50	857 mg/l, 48 hours
Ethyl alcohol (CAS 64-17-5)	Freshwater invertebrate	Aquatic Invertebrate NOEC	9.6 mg/l, 10 days
Ethyl alcohol (CAS 64-17-5)	Marine water invertebrate	Aquatic Invertebrate NOEC	79 mg/l, 96 hours
Ethyl alcohol (CAS 64-17-5)	Lemna minor	Aquatic Other EC50	4432 mg/l, 7 days
Ethyl alcohol (CAS 64-17-5)	Lemna minor	Aquatic Other NOEC	280 mg/l, 7 days
Ethyl alcohol (CAS 64-17-5)	Micro-organisms	Other Micro-organisms LC50	5800 mg/l, 4 hours
Ethyl alcohol (CAS 64-17-5)	Terrestrial plant	Terrestrial Plant EC50	633 mg/kg dw
Toluene (CAS 108-88-3)	Daphnia magna	Aquatic Acute Crustacea EC50	11.5 mg/l, 48 hours
Toluene (CAS 108-88-3)	Oncorhynchus kisutch	Aquatic Acute Fish LC50	5.5 mg/l, 96 hours
Toluene (CAS 108-88-3)	Ceriodaphnia dubia	Aquatic Chronic Crustacea NOEC	0.74 mg/l, 7 days
Toluene (CAS 108-88-3)	Oncorhynchus kisutch	Aquatic Chronic Fish NOEC	1.4 mg/l, 40 days

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

13.1.1 Product

- 13.1.1.1 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
- 13.1.1.2 Dispose in accordance with all applicable regulations. The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

- 13.1.1.3 Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
- 13.1.1.4 Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport Information

14.1 DOT (US)

- 14.1.1 UN Number: UN1987
- 14.1.2 Class: 3
- 14.1.3 Packing Group: II
- 14.1.4 Proper Shipping Name: Alcohols, n.o.s. (Ethyl alcohol; Toluene RQ = 21008 LBS)
- 14.1.5 Marine Pollutant: No.
- 14.1.6 Special Provisions: 172, IB2, T7, TP1, TP8, TP28
- 14.1.7 Packaging – Exceptions: 4b, 150
- 14.1.8 Packaging – Non-bulk: 202
- 14.1.9 Packaging – Bulk: 242
- 14.1.10 Reportable Quantity (RQ): Toluene RQ = 21008 LBS
- 14.1.11 Poison Inhalation Hazard: N/A
- 14.1.12 Subsidiary Risk: -
- 14.1.13 Label(s): 3
- 14.1.14 Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.

14.2 IMDG

- 14.2.1 UN Number: UN1987
- 14.2.2 Class: 3
- 14.2.3 Packing Group: II
- 14.2.4 EMS-No: F-E, S-D
- 14.2.5 Marine Pollutant: No.
- 14.2.6 Proper Shipping Name: ALCOHOLS, N.O.S. (Ethyl alcohol; Toluene)
- 14.2.7 Subsidiary Risk: -
- 14.2.8 Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.
- 14.2.9 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not established.

14.3 IATA

- 14.3.1 UN Number: UN1987
- 14.3.2 Class: 3
- 14.3.3 Packing Group: II
- 14.3.4 ERG Code: 3L
- 14.3.5 Proper Shipping Name: Alcohols, n.o.s. (Ethyl alcohol; Toluene)
- 14.3.6 Subsidiary Risk: -
- 14.3.7 Environmental Hazards: No.
- 14.3.8 Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.

SECTION 15: Regulatory Information

15.1 CERCLA Reportable Quantity

- 15.1.1 CERCLA Hazardous Substance List (40 CFR 302.4): Toluene (CAS 108-88-3) Listed.

15.2 SARA 304 Extremely Hazardous Substances Reportable Quantity

- 15.2.1 SARA 304 Emergency release notification: Not regulated.

15.3 SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

- 15.3.1 SARA 302 Extremely hazardous substance: Not listed.

15.4 SARA 311/312 Hazards

- 15.4.1 Fire Hazard: Flammable (gases, aerosols, liquids, or solids)

15.4.2 Health Hazard: Serious eye damage or eye irritation; Reproductive toxicity; Specific target organ toxicity (single or repeated exposure)

15.4.3 Chronic Health Hazard / SARA 313: SARA 313 (TRI reporting): Toluene, CAS number 108-88-3, 4.76 % by wt.

15.5 Clean Air Act

15.5.1 Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Toluene (CAS 108-88-3)

15.5.2 Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated.

15.5.3 Safe Drinking Water Act (SDWA): Not regulated.

15.5.4 SOCM Intermediate or Final VOC (40 CFR 60.489)

15.5.4.1 N/A

15.6 Clean Water Act

15.6.1 N/A

15.7 State Regulations

15.7.1 Massachusetts Right To Know

15.7.1.1 Ethyl alcohol (CAS 64-17-5); Toluene (CAS 108-88-3)

15.7.2 New Jersey Right To Know

15.7.2.1 Ethyl alcohol (CAS 64-17-5); Toluene (CAS 108-88-3)

15.7.3 Pennsylvania Right To Know

15.7.3.1 Ethyl alcohol (CAS 64-17-5); Toluene (CAS 108-88-3)

15.7.4 Rhode Island Right To Know

15.7.4.1 Ethyl alcohol (CAS 64-17-5); Toluene (CAS 108-88-3)

15.8 California Proposition 65

15.8.1 WARNING: This product can expose you to Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. California Proposition 65 - CRT: Listed date/Developmental toxin: Toluene (CAS 108-88-3) Listed: January 1, 1991. US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a)): Toluene (CAS 108-88-3)

15.9 Chemical Inventories

15.9.1 TSCA: United States & Puerto Rico, Toxic Substances Control Act (TSCA) Inventory: Yes. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

15.9.2 International Inventories

Country/Region	Inventory	On Inventory (Yes/No)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

Country/Region	Inventory	On Inventory (Yes/No)
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

15.10 Other Federal Regulations

- 15.10.1 OSHA Hazard Communication Standard: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- 15.10.2 OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053): Not regulated.
- 15.10.3 Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2)) and Chemical Code Number: Toluene (CAS 108-88-3) 6594
- 15.10.4 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)): Toluene (CAS 108-88-3) 35 %WV; DEA Exempt Chemical Mixtures Code Number: Toluene (CAS 108-88-3) 594
- 15.10.5 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace: Ethyl alcohol (CAS 64-17-5) Low priority

SECTION 16: Other Information

16.1 HMIS Ratings

- 16.1.1 Health: 2*
- 16.1.2 Flammability: 3
- 16.1.3 Physical Hazard: 0

16.2 Disclaimer

16.2.1 The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Ultrapure LLC and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

16.3 Date of Preparation or Last Revision

- 16.3.1 Date of Last Revision: July 2026