



VAPCO PRODUCTS, INC.

Safety Data Sheet Re-Energize

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Re-Energize
Product number	CC-1
Brand	Vapco

1.3 Recommended use of the chemical and restrictions on use

Recommended use: Cleaners for mechanical electrical equipment

Restrictions on use: After December 8, 2026, this chemical substance (as defined in TSCA section 3(2))/product cannot be distributed in commerce to retailers for any use. After March 8, 2027, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of PCE equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant/intermediate; (2) Processing into formulation, mixture or reaction product; (3) Processing by repackaging; (4) Recycling; (5) Industrial and commercial use as a solvent in open-top batch vapor degreasing; (6) Industrial and commercial use as solvent in closed-loop batch vapor degreasing; (7) Industrial and commercial use in maskant for chemical milling; (8) Industrial and commercial use as a processing aid in catalyst regeneration in petrochemical manufacturing; (9) Industrial and commercial use as a processing aid in sectors other than petrochemical manufacturing; (10) Industrial and commercial use as solvent for cold cleaning of tanker vessels; (11) Industrial and commercial use as energized electrical cleaner; (12) Industrial and commercial use in laboratory chemicals; (13) Industrial and commercial use in solvent-based adhesives and sealants; (14) Industrial and commercial use in dry cleaning in 3rd generation machines until December 20, 2027; (15) Industrial and commercial use in all dry cleaning and related spot cleaning until December 19, 2034; (16) Export; and (17) Disposal.

1.4 Supplier's details

Name	Vapco Products, Inc.
Address	401 Marshall Road Valley Park, Missouri 63088 United States
Telephone	(636) 923-2121
Fax	(636) 923-3002
email	info@VapcoProducts.com

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1.5 Emergency phone number

(800) 255-3924

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2012)

- Acute toxicity, inhalation, Cat. 4
- Carcinogenicity, Cat. 2
- Gases under pressure, compressed gas
- Skin corrosion/irritation, Cat. 2
- Specific target organ toxicity (single exposure), Cat. 3

2.2 GHS label elements, including precautionary statements

Pictograms



Signal word

Warning

Hazard statement(s)

H280
H315
H332
H335
H336
H351

Contains gas under pressure; may explode if heated
Causes skin irritation
Harmful if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness
Suspected of causing cancer

Precautionary statement(s)

P201
P202
P261
P264
P271
P280
P302+P352
P304+P340
P308+P313
P312
P321
P332+P313
P362+P364
P403+P233
P405
P410+P403
P501

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER/doctor if you feel unwell.
Specific treatment (see First Aid on this label).
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Protect from sunlight. Store in a well-ventilated place.
Dispose of contents/container to the specifications of local, regional, national, and international regulations.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Perchloroethylene

Concentration	60 - 100 % (weight)
EC no.	204-825-9
CAS no.	127-18-4
Index no.	602-028-00-4

2. Carbon Dioxide

Concentration	1 - 10 % (weight)
CAS no.	124-38-9

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
If inhaled	First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice/attention.
In case of skin contact	Immediately drench affected area with water for at least 15 minutes. Remove contaminated clothing immediately. Obtain medical attention if irritation develops or persists.
In case of eye contact	Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
If swallowed	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most important symptoms/effects, acute and delayed

Symptoms/Injuries: Harmful if inhaled. Causes serious eye irritation. May cause drowsiness and dizziness. Asphyxia by lack of oxygen: risk of death.

Symptoms/Injuries After Inhalation: High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms. Inhalation is likely to cause adverse health effects including, but not limited to: irritation, difficulty breathing, and unconsciousness. In elevated concentrations, may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness and death. This product contains chlorinated solvents, which is associated with cardiac sensitization following very high exposures or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine and catecholamines. Careful consideration should be applied preceding administration of epinephrine or similar heart-stimulating substances.

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Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Not considered a potential route of exposure.

Symptoms/Injuries After Skin Contact: Prolonged or repeated contact may dry skin.

Chronic Health Hazards: Possible cancer causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system. Note to physician: Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Dry chemical, foam, or carbon dioxide (CO₂).

5.2 Specific hazards arising from the chemical

Explosion Hazard: Container may explode in heat of fire. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

Reactivity: May react with chemically active metals and acids.

5.3 Special protective actions for fire-fighters

Precautionary Fire Measures: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use dry chemical, foam, or carbon dioxide (CO₂). Do not breathe fumes from fire or vapors from decomposition. Do NOT fight fire when fire reaches containers. Evacuate area. Fight fire remotely due to the risk of explosion. Shut off all sources of ignition. Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Wear NIOSH-approved Self-Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

Hazardous Combustion Products: Carbon oxide(s), chlorine, hydrogen chloride and phosgene.

Further information

Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapors, spray, mist, gas. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedure: Eliminate ignition sources first, then ventilate the area. Evacuate unnecessary personnel, isolate, and ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

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6.2 Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3 Methods and materials for containment and cleaning up

For Containment: Ventilate the area. Contain any spills with dikes or absorbents to prevent further migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Eliminate all ignition sources. Ventilate area. Stop the ignition source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Take up liquid spill into absorbent material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Waste Disposal: Dispose of in accordance with local, regional, national, and international regulations. Containers may be hazardous when empty. Do not flame cut, braze, or weld. Product should be fully characterized prior to disposal (40 CFR 261).

Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Additional Hazards When Processed: Do not pressurize, cut, or weld containers. Ruptured cylinders may rocket. Pressurized container: May burst if heated. Do not pierce or burn, even after use.

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Do not breathe gas, mist, spray, vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not spray on open flame or other ignition source.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Other Precautions: Keep out of reach of children. Follow label instructions. Vapors may collect in low lying areas.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Store in a dry, cool place. Keep only in the original container in a cool, well-ventilated place away from ignition sources. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials: Strong acids, strong alkalis, strong oxidizing agents, chemically active metals (e.g. aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium), concentrated nitric acid, some plastics, rubbers and coatings.

Storage Temperature: <50°C/122°F.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Perchloroethylene (CAS: 127-18-4)

TWA (Inhalation): 50 ppm; 340 mg/m³; AU (AU/SWA)

STEL (Inhalation): 150 ppm; 1020 mg/m³; AU (AU/SWA)

IOELV-LTEL [Tetrachloroethylene] (Inhalation): 138 mg/m³; EU (EU/OSHA)

Skin designation: Yes. List no. 4 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

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IOELV-LTEL [Tetrachloroethylene] (Inhalation): 20 ppm; EU (EU/OSHA)

Skin designation: Yes. List no. 4 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

IOELV-STEL [Tetrachloroethylene] (Inhalation): 275 mg/m³; EU (EU/OSHA)

Skin designation: Yes. List no. 4 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

IOELV-STEL [Tetrachloroethylene] (Inhalation): 40 ppm; EU (EU/OSHA)

Skin designation: Yes. List no. 4 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

2. Carbon dioxide (CAS: 124-38-9)

TWA (Inhalation): 5000 ppm; 9000 mg/m³; AU (AU/SWA)

STEL (Inhalation): 30000 ppm; 54000 mg/m³; AU (AU/SWA)

TWA [Carbon dioxide in coal mines] (Inhalation): 12500 ppm; 22500 mg/m³; AU (AU/SWA)

IOELV-LTEL (Inhalation): 9000 mg/m³; EU (EU/OSHA)

List no. 2 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

IOELV-LTEL (Inhalation): 5000 ppm; EU (EU/OSHA)

List no. 2 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

PEL (Inhalation): 5000 ppm; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 9000 mg/m³; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 5000 ppm, (ST) 30,000 ppm; US (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 5000 ppm, (ST) 30,000 ppm; US (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Use only outdoors or in well-ventilated area. Ensure all local, regional, national, and international regulations are being observed. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Chemical safety goggles. Insufficient ventilation: wear respiratory protection. Respiratory protection of the dependent type.

Skin protection

Wear protective gloves and clothing.

Body protection

Wear suitable protective clothing. Wear protective gloves. Chemical resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Respiratory protection

Use a NIOSH-approved Self-Containing Breathing Apparatus whenever exposure may exceed established Occupational Exposure Limits.

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SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Aerosol
Color	Colorless
Odor	Chlorinated solvent
Odor threshold	N/D
Melting point/freezing point	-8°F (-22°C)
Boiling point or initial boiling point and boiling range	250°F (121°C)
Flammability	Not considered a flammable or an extremely flammable aerosol by OSHA (29 CFR 1910.1200)
Lower and upper explosion limit/flammability limit	N/D
Flash point	N/D
Auto-ignition temperature	N/D
Decomposition temperature	N/D
pH	N/A
Kinematic viscosity	N/D
Solubility	Insoluble in water
Partition coefficient n-octanol/water (log value)	2.88
Vapor pressure	14.7 mmHg at 20°C
Evaporation rate	0.1 (Slow)
Density and/or relative density	1.623
Relative vapor density	5.83 (Air=1)

SECTION 10: Stability and reactivity

10.1 Reactivity

May react with chemically active metals and acids.

10.2 Chemical stability

Contains gas under pressure; may explode if heated. Pressurized container: may burst if heated.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

Direct sunlight, extremely high and low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5 Incompatible materials

Strong acids, strong alkalis, strong oxidizing agents, chemically active metals (e.g. aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium), concentrated nitric acid, some plastics, rubbers and coatings.

10.6 Hazardous decomposition products

Carbon oxide(s), chlorine, hydrogen chloride and phosgene.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Tetrachloroethylene

LC50 Inhalation - Rat - 34200 mg/m³ - 8 hrs

LD50 Skin - Rabbit - >3228 mg/kg

LD50 Oral - Rat - 2629 mg/kg

Skin corrosion/irritation

Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin.

Serious eye damage/irritation

Causes irritation, burning, redness, tearing.

Respiratory or skin sensitization

Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin.

Germ cell mutagenicity

Not classified.

Carcinogenicity

Contains a component suspected of causing cancer.

Reproductive toxicity

Not classified.

Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness, weakness and fatigue.

Specific target organ toxicity (STOT) - repeated exposure

Prolonged or repeated contact may dry skin.

Aspiration hazard

Irritation to respiratory tract, dizziness, headache, nausea, depression of central nervous system, prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects, and death.

Additional information

Symptoms/Injuries: Harmful if inhaled. Causes serious eye irritation. May cause drowsiness and dizziness.

Asphyxia by lack of oxygen: risk of death.

Symptoms/Injuries After Inhalation: High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms. Inhalation is likely to cause adverse health effects including, but not limited to: irritation, difficulty breathing, and unconsciousness. In elevated concentrations, may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness and death. This product contains chlorinated solvents, which is associated with cardiac sensitization following very high exposures or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine and catecholamines. Careful consideration should be applied preceding administration of epinephrine or similar heart-stimulating substances.

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Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Not considered a potential route of exposure.

Symptoms/Injuries After Skin Contact: Prolonged or repeated contact may dry skin.

Chronic Health Hazards: Possible cancer causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system. Note to physician: Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

SECTION 12: Ecological information

Toxicity

Tetrachloroethylene

LC50 - Pimephales promelas (fathead minnow) - 18.4 mg/L - 96 hrs

LC50 - Daphnia magna (water flea) - 18 mg/L - 48 hrs

LC50 - Oncorhynchus mykiss (rainbow trout) - 5 mg/L - 96 hrs

LC50 - Lepomis macrochirus (bluegill) - 13 mg/L - 96 hrs

Persistence and degradability

Component or components of this product are not biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate.

Mobility in soil

This product is mobile in soil.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations. Do not pierce or burn, even after use.

Sewage disposal

Avoid release into the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Other disposal recommendations

Container may remain hazardous when empty. Continue to observe all precautions. Do not puncture or incinerate container. Product should be fully characterized prior to disposal.

SECTION 14: Transport information

DOT (US)

UN Number: UN1950

Class: 2.2

Packing Group: N/A

Proper Shipping Name: Aerosols, non-flammable, (each not exceeding 1 L capacity)

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IMDG

UN Number: UN1950

Class: 2.2

Packing Group: N/A

EMS Number: N/A

Proper Shipping Name: Aerosols, non-flammable, (each not exceeding 1 L capacity)

IATA

UN Number: UN1950

Class: 2.2

Packing Group: N/A

Proper Shipping Name: Aerosols, non-flammable, (each not exceeding 1 L capacity)

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Proposition 65 Chemicals List

WARNING: This product can expose you to chemicals including Tetrachloroethylene (Perchloroethylene), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Massachusetts Right To Know Components (105 CMR 670)

Chemical name: PERCHLOROETHYLENE

CAS number: 127-18-4

Chemical name: CARBON DIOXIDE

CAS number: 124-38-9

New Jersey Right To Know Components

Common name: TETRACHLOROETHYLENE

CAS number: 127-18-4

Common name: CARBON DIOXIDE

CAS number: 124-38-9

Pennsylvania Right To Know Components

Chemical name: ETHENE, TETRACHLORO-

CAS number: 127-18-4

Chemical name: CARBON DIOXIDE

CAS number: 124-38-9

US EPA TSCA public inventory

Chemical name: Perchloroethylene

CAS number: 127-18-4

Chemical name: Carbon Dioxide

CAS number: 124-38-9

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15.2 Chemical Safety Assessment

After December 8, 2026, this chemical substance (as defined in TSCA section 3(2))/product cannot be distributed in commerce to retailers for any use. After March 8, 2027, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of PCE equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant/intermediate; (2) Processing into formulation, mixture or reaction product; (3) Processing by repackaging; (4) Recycling; (5) Industrial and commercial use as a solvent in open-top batch vapor degreasing; (6) Industrial and commercial use as solvent in closed-loop batch vapor degreasing; (7) Industrial and commercial use in maskant for chemical milling; (8) Industrial and commercial use as a processing aid in catalyst regeneration in petrochemical manufacturing; (9) Industrial and commercial use as a processing aid in sectors other than petrochemical manufacturing; (10) Industrial and commercial use as solvent for cold cleaning of tanker vessels; (11) Industrial and commercial use as energized electrical cleaner; (12) Industrial and commercial use in laboratory chemicals; (13) Industrial and commercial use in solvent-based adhesives and sealants; (14) Industrial and commercial use in dry cleaning in 3rd generation machines until December 20, 2027; (15) Industrial and commercial use in all dry cleaning and related spot cleaning until December 19, 2034; (16) Export; and (17) Disposal.

SECTION 16: Other information

N/A = Not applicable; N/D = Not determined

16.1 Further information/disclaimer

To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.

16.2 Preparation information

Prepared by: Jessica Wilson
Date prepared: 1-31-2025

