



VAPCO PRODUCTS, INC.

Safety Data Sheet Mean Green Long Tack

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Mean Green Long Tack
Product number	MGLT-LC, MGLT-SC- MGLT-200
Brand	Vapco

1.3 Recommended use of the chemical and restrictions on use

Recommended use: Solvent-based contact adhesive

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 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 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

1.5 Emergency phone number

(800) 255-3924

Safety Data Sheet

SECTION 2: Hazard identification

General hazard statement

Caution: Non-Flammable Adhesive Mixture: Contains a component that is flammable in its pure state according to GHS definitions, however when combined in the overall adhesive mixture the adhesive is not flammable in either its liquid or dry states.

2.1 Classification of the substance or mixture

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

- Acute toxicity, inhalation, Cat. 4
- Aspiration hazard, Cat. 1
- Carcinogenicity, Cat. 1A
- Gases under pressure, liquefied gas
- Skin corrosion/irritation, Cat. 2
- Specific target organ toxicity (single exposure), Cat. 3
- Simple asphyxiants

2.2 GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
—	May displace oxygen and cause rapid suffocation

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hand thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see First Aid on this label).
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Safety Data Sheet

P403+P233
P405
P410+P403
P501

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.

Statement regarding ingredients of unknown toxicity

This product contains the following percentage of chemicals of unknown toxicity: 30%.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Tetrachloroethylene

Concentration	55 - 65 % (weight)
EC no.	204-825-9
CAS no.	127-18-4
Index no.	602-028-00-4

2. Petroleum gases, liquified, sweetened, if they contain > 0.1% w/w Butadiene

Concentration	4 - 6 % (weight)
CAS no.	68476-86-8

3. Carbon Dioxide

Concentration	3 - 4 % (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. Excessive exposure to mists or vapors generated by heat may cause respiratory irritation, headaches, loss of unconsciousness, and even death. Excessive exposure may increase sensitivity to epinephrine and cause irregular heartbeats.
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. Repeated or prolonged contact may cause redness, burning, and blisters. Can be absorbed through skin but not in sufficient amounts to cause adverse effects.
In case of eye contact	Immediately rinse with water for at least 15 minutes. Remove contact

Safety Data Sheet

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. May cause gastrointestinal irritation, nausea, vomiting. Large amounts may lead to drowsiness and unconsciousness.

4.2 Most important symptoms/effects, acute and delayed

Acute Health Hazards

Symptoms/Injuries: Harmful if inhaled. Causes serious skin irritation. May cause drowsiness or 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 pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness and death. This product contains chlorinated solvent and light hydrocarbon material, 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.

Symptoms/Injuries After Eye Contact: Contact causes mild irritation with redness, tearing, and blurred vision.

Other: Depending on the level and duration of exposure, other possible signs and symptoms from breathing, swallowing, and/or entry of this material through the skin may include: irritation of the nose, throat, airways, and lungs with cough, stomach or intestinal upset with pain, nausea, vomiting, and/or diarrhea, central nervous system depression with nausea, headache, dizziness, fatigue, drowsiness, and unconsciousness, anesthesia, confusion, temporary changes in mood or behavior, irregular heartbeats (which may lead to unconsciousness and death) and visual disturbances.

Chronic Health Hazards: Possible cancer causing agent and overexposure may also include damage to skin, kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, lungs, blood, or central nervous system.

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.

Note to physician: No specific antidote. Treat patient symptomatically in accordance with clinical condition.

Maintain adequate ventilation and oxygenation of the patient. If burn is present, treat as any thermal burn. This material is an aspiration hazard. Risk of aspiration must be weighed against possible toxicity of the material (see "ingestion") when determining whether to induce emesis or to perform gastric lavage. Gastric lavage may be effective and should preferably be undertaken within 1 hour. This material sensitizes the heart to the effects of sympathomimetic amines. Adrenaline, epinephrine and similar sympathomimetic drugs should be avoided following exposure as cardiac arrhythmia may result with possible subsequent cardiac arrest. Following ingestion adsorbents such as activated charcoal may be of value.

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.

Incompatibility: May react with some plastics, strong oxidizing agents, acids, caustics, alkalis, and chemically active metals (e.g. aluminum, magnesium, sodium, potassium, and lithium). Increased risk of fire or explosion.

Safety Data Sheet

Certain mixtures of chlorinated solvents may be flammable or reactive under certain conditions. Keep away from sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source. May react with freshly galvanized surfaces to produce highly toxic dichloroacetylene.

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: Hydrogen chloride, phosgene, chlorine, carbon oxides, and various hydrocarbons.

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.

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.

Safety Data Sheet

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: May react with some plastics, strong oxidizing agents, acids, caustics, alkalis, and chemically active metals (e.g. aluminum, magnesium, sodium, potassium, and lithium). Increased risk of fire or explosion. Certain mixtures of chlorinated solvents may be flammable or reactive under certain conditions. Keep away from sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source. May react with freshly galvanized surfaces to produce highly toxic dichloroacetylene.

Storage Temperature: <50°C/122°F.

Specific end use(s)

Solvent-based contact adhesive

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Carbon Dioxide (CAS: 124-38-9)

PEL-ST (Inhalation): 54,000 mg/m³, 30,000 ppm (US/OSHA)

PEL-TWA (Inhalation): 9,000 mg/m³, 5,000 ppm (US/OSHA)

PEL-TWA (Inhalation): 18,000 mg/m³, 10,000 ppm (US/OSHA)

REL-ST (Inhalation): 54,000 mg/m³, 30,000 ppm (NIOSH)

REL-TWA (Inhalation): 9,000 mg/m³, 5,000 ppm (NIOSH)

TLV-STEL (Inhalation): 54,000 mg/m³, 30,000 ppm (ACGIH)

TLV-TWA (Inhalation): 9,000 mg/m³, 5,000 ppm (ACGIH)

2. Petroleum gases, liquified, sweetened, if they contain > 0.1% w/w Butadiene (CAS: 68476-86-8)

IDLH (Inhalation): 2,100 ppm (10% LEL) (US IDLH)

PEL-TWA (Inhalation): 1,800 mg/m³, 1,000 ppm (US/OSHA)

REL-TWA (Inhalation): 1,800 mg/m³, 800 ppm (NIOSH)

STEL (Inhalation): 1,000 ppm (ACGIH)

TWA (Inhalation): 1,000 ppm (ACGIH)

3. Tetrachloroethylene (CAS: 127-18-4 EC: 204-825-9)

IDLH (Inhalation): 150 ppm

Safety Data Sheet

STEL (Inhalation): Not established (US/OSHA)

STEL (Inhalation): 100 ppm (ACGIH)

TWA (Inhalation): 25 ppm (US/OSHA)

TWA (Inhalation): 25 ppm (ACGIH)

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.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Web spray
Color	Green
Odor	Chlorinated solvent odor
Odor threshold	N/D
Melting point/freezing point	-8.4°F (-22.4°C)
Boiling point or initial boiling point and boiling range	250°F (121.1°C)
Flammability	Non-flammable
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	400-600 cPs
Solubility	Insoluble in water
Partition coefficient n-octanol/water (log value)	2.88 (Perchloroethylene)
Vapor pressure	14.7 mmHg at 20°C (Perchloroethylene)
Evaporation rate	0.1 (Ether=1)
Density and/or relative density	1.43 g/L

Safety Data Sheet

Relative vapor density
Particle characteristics

5.83 (Air=1)
Percent solids: 29.1%

Supplemental information regarding physical hazard classes

Volatile Organic Content: 4.70% [0.67 g/L]
Maximum Incremental Reactivity: 0.46

SECTION 10: Stability and reactivity

10.1 Reactivity

Certain mixtures of chlorinated solvents may be flammable or reactive under certain conditions. May be reactive to chemically active metals and bases.

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

Chlorine liberating material. Do not mix with acids, ammonia or other cleaning compounds. Avoid contact with open flame, electric arcs, or other hot surfaces that may cause thermal decomposition.

10.5 Incompatible materials

May react with some plastics, strong oxidizing agents, acids, caustics, alkalis, and chemically active metals (e.g. aluminum, magnesium, sodium, potassium, and lithium). Increased risk of fire or explosion. Certain mixtures of chlorinated solvents may be flammable or reactive under certain conditions. Keep away from sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source. May react with freshly galvanized surfaces to produce highly toxic dichloroacetylene.

10.6 Hazardous decomposition products

Hydrogen chloride, phosgene, chlorine, hexachloroethane, hexachlorobenzene, carbon oxide(s), and various hydrocarbons.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Tetrachloroethylene

LD50 Dermal - Rabbit - >3,228 mg/kg

LD50 Oral - Rat - >2,629 mg/kg

LC50 Inhalation - Rat - 34,200 mg/m³ - 8 hr

Exposure to 100-200 ppm has been reported to cause irritation to the eyes, throat and nose, headache, light-headedness, and dizziness after several hours exposure. Exposure to concentrations of the order of 500 ppm for short periods of time (e.g. 5 minutes) may lead to light-headedness or dizziness. Exposure to levels of 1000 ppm or higher may cause intense respiratory irritation and anesthetic effects. Exposure to high concentrations or prolonged over exposure (500 ppm or greater) has caused unconsciousness and death. Deaths are generally attributed to ventricular fibrillation and central nervous system depression. Liver and kidney damage have been reported in cases of accidental excessive overexposure to perchloroethylene. Acute and short-term over-exposure to perchloroethylene has been associated with changes in electroencephalographic scores.

Safety Data Sheet

Skin corrosion/irritation

May cause localized defatting, drying with prolonged or repeated contact. Irritating to skin. Will remove the natural skin oils resulting in dryness, cracking and dermatitis. Repeated and/or prolonged skin contact may cause reddening, burning and blisters. Permanent damage is unlikely. Can be absorbed through skin but not in sufficient amounts to cause adverse effects.

Serious eye damage/irritation

Causes mild irritation, redness, burning. Liquid splashes and high concentrations of vapor may cause irritation with tearing, redness or a stinging or burning feeling. Effects may become more serious with repeated or prolonged contact.

Respiratory or skin sensitization

Harmful by inhalation. Excessive inhalation of vapors may cause irritation of nose and throat. Causes dizziness, headaches, nervous system depression, excessive or prolonged exposure may cause unconsciousness. High exposures by inhalation will cause anesthetic effects. This may result in loss of consciousness and could prove fatal if exposure has been severe. In susceptible individuals, cardiac sensitization to circulating epinephrine-like compounds can result in sudden, fatal cardiac arrhythmias. In confined or poorly ventilated areas vapors can readily accumulate and can cause unconsciousness and death. Dizziness may occur at 200 ppm perchloroethylene; progressively higher levels may also cause nasal irritation, nausea, in-coordination, drunkenness; and over 1000 ppm, unconsciousness and death. A single brief (minutes) inhalation exposure to levels above 6000 ppm perchloroethylene may be immediately fatal. Based on structural analogy and/or equivocal data in animals, excessive exposure may potentially increase sensitivity to epinephrine and increase myocardial irritability (irregular heartbeats).

Germ cell mutagenicity

Not classified.

Carcinogenicity

Tetrachloroethylene

IARC: Tetrachloroethylene is classified as 2A (Probably carcinogenic to humans).

NTP: Tetrachloroethylene is classified as reasonably anticipated to be a human carcinogen.

OSHA: Not listed as a carcinogen.

Tetrachloroethylene has been shown to increase the incidence of tumors in certain strains of mice and rats. Other long-term inhalation studies in rats failed to show tumorigenic response. While tetrachloroethylene is not believed to pose a measurable carcinogenic risk to man when handled as recommended, and while human data are limited and inconclusive and have not established an association between exposure and cancer, tetrachloroethylene should be considered to pose a cancer risk pending the availability of further scientific evidence. An increased incidence of some forms of cancers have been observed in various epidemiology studies of workers in the dry cleaning industry and other workers potentially exposed to chemicals including tetrachloroethylene. Smoking, alcohol consumption, diet and other factors are known to increase risk of cancer and may have been confounding factors in these studies. These studies were also limited by the lack of exposure measurements or other valid indicators of potential exposure to tetrachloroethylene, and potential exposure to other chemicals. The current epidemiological evidence does not support a conclusion that occupational exposure to tetrachloroethylene is a risk factor for cancer of any specific site. Animal studies have shown increases in liver cancer in mice, and renal cancer and mononuclear cell leukemia in rats. The relevance of these observations to humans is not clear at this time. The International Agency for Research on Cancer (IARC) has concluded there is sufficient evidence of carcinogenicity to experimental animals and limited evidence of carcinogenicity to humans (Group 2A a substance probably carcinogenic to humans). NTP has classified tetrachloroethylene as reasonable anticipated to be a human carcinogen. The ACGIH classifies tetrachloroethylene in category A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans.

Reproductive toxicity

Not classified.

Safety Data Sheet

Summary of evaluation of the CMR properties

Repeated exposure to levels well above the occupational exposure limit may produce adverse health effects on the lungs, liver, kidneys, and skin. Observations in animal studies include: endocrine system effects, immune system effects, and blood disorders. The relevance of these observations to humans is not clear at this time.

Tetrachloroethylene has been associated with cancer in rodents. Extensive evaluations of possible mechanisms have led to the conclusion that they are of little, if any, relevance to man even at high exposure levels. Repeated exposure to levels well above the occupational exposure limit may produce adverse effects on the liver and kidneys.

Exposure to tetrachloroethylene has been associated with changes in urinary and serum indicators of renal function and liver function. Findings from animal studies indicate the liver and kidney are target organs. Changes in some blood parameters and evidence of reduced erythropoiesis have been observed in sub-chronic animal studies.

Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity (STOT) - repeated exposure

Repeated or prolonged exposure may be toxic to kidneys, liver, skin, central nervous system (CNS).

Aspiration hazard

Yes.

Additional information

Medical Conditions Aggravated: Pre-existing disorders of the following organs or systems which may be aggravated by exposure to this material include: liver, kidneys, heart, and nervous system. Synergistic Materials: Consumption of alcoholic beverages may increase potential for development of toxic effects resulting from exposure to this product.

Symptoms/Injuries: Harmful if inhaled. Causes serious skin 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 pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness and death. This product contained chlorinated solvent and light hydrocarbon material, 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.

Symptoms/Injuries After Eye Contact: Contact causes mild irritation with redness, tearing, and blurred vision.

Chronic Health Hazards: Possible cancer causing agent and overexposure may also include damage to skin, kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, lungs, blood, or central nervous system.

SECTION 12: Ecological information

Toxicity

Tetrachloroethylene

LC50 - Fathead Minnow - 18.4 ppm - 96 hr

LC50 - Bluegill - 12.9 ppm - 96 hr

LC50 - Rainbow Trout - 5 ppm - 96 hr

LC50 - Mysid - 10.2 ppm - 96 hr

LC50 - Sheepshead Minnow - 29.4-52.2 ppm - 96 hr

Persistence and degradability

Biodegradation under aerobic conditions is below detectable limits. Theoretical oxygen demand (ThOD) is calculated to be 0.19 p/p. Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

Safety Data Sheet

Degradation is expected in the atmospheric environment within days to weeks. Biodegradation rate may increase in soil and/or water with acclimation. Persists in ground water. Will not significantly hydrolyze in soil or water under normal environmental conditions, but slow biodegradation may occur in groundwater where acclimated populations of microorganisms exist. Tetrachloroethylene in water is subject to volatilization, with half-life estimates ranging from less than one day to several weeks. Log air/water partition coefficient (log Kaw) is estimated to be -0.30-0.37. The substance is degraded fairly rapidly in the lower atmosphere (troposphere). Vapors in air are subject to photo-oxidation, but do not contribute to tropospheric ozone formation. Half-life estimates ranges from 2 months to less than 1 hour. The product is anticipated to be substantially removed in biological treatment processes.

Bioaccumulative potential

Product is not expected to significantly bio-accumulate in aquatic organisms or absorb to sediment.

Mobility in soil

Product can leach through the soil to reach groundwater. Soil adsorption potential is low. Potential for mobility in soil is medium (Koc between 150 and 500). Log soil organic carbon partition coefficient (log Koc) is estimated to be 2.1-3.2.

Other adverse effects

Avoid release to the environment. This material is hazardous to aquatic life. Do not let residue come in contact with waterways. This material may leach into groundwater. Will quickly evaporate in the soil and water and may biodegrade to a moderate extent in the water. Will not significantly bioaccumulate.

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: UN1956

Class: 2.2

Packing Group: N/A

Proper Shipping Name: Compressed gas, n.o.s.

IMDG

UN Number: UN1956

Class: 2.2

Packing Group: N/A

EMS Number: N/A

Proper Shipping Name: Compressed gas, n.o.s.

Safety Data Sheet

IATA

UN Number: UN1956

Class: 2.2

Packing Group: N/A

Proper Shipping Name: Compressed gas, n.o.s.

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.

US EPA TSCA public inventory

Chemical name: Tetrachloroethylene

CAS number: 127-18-4

Chemical name: Petroleum gases, liquified, sweetened, if they contain > 0.1% w/w Butadiene

CAS number: 68476-86-8

Chemical 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

New Jersey Right To Know Components

Common name: TETRACHLOROETHYLENE

CAS number: 127-18-4

Common name: CARBON DIOXIDE

CAS number: 124-38-9

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

15.2 Chemical Safety Assessment

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 solvent in open-top batch vapor degreasing; (6) Industrial and

Safety Data Sheet

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 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: 1-23-2025

