

Ester Tanks

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Ester Tanks
SDS Number: IMS 06-128,129-1
Product Code: 131408,131397
Revision Date: 12/2/2022
Version: 2
Product Type: Aerosol Mold Cleaner
Supplier Details: IMS Company
 10373 Stafford Rd.
 Chagrin Falls, OH 44023-5296
Phone: 1-440-543-1615
Emergency: Chemtel 1-800-255-3924

NOTE: The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. We provide this information as guidance for providing personal protection to your employees. The user has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. The user must meet all applicable safety and health standards. We provide this information as guidance for providing personal protection to your employees.

2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Gases Under Pressure, Liquefied Gas
 Health, Acute toxicity, 5 Oral
 Health, Skin corrosion/irritation, 2
 Health, Serious Eye Damage/Eye Irritation, 2 A
 Health, Specific target organ toxicity - Single exposure, 3
 Health, Germ cell mutagenicity, 2
 Health, Carcinogenicity, 1 B
 Health, Specific target organ toxicity - Single exposure, 2

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H280 - Contains gas under pressure; may explode if heated
 H303 - May be harmful if swallowed
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H336 - May cause drowsiness or dizziness
 H341 - Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
 H350 - May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
 H371 - May cause damage to organs (or state all organs affected, if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

GHS Precautionary Statements:

P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P251 - Do not pierce or burn, even after use.

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P260 - Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P264 - Wash skin thoroughly after handling.
 P271 - Use only outdoors or in a well-ventilated area.
 P273 - Avoid release to the environment.
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P281 - Use personal protective equipment as required.
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P313 - IF exposed or concerned: Get medical advice/ attention.
 P309 + P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
 P312 - Call a POISON CENTER or doctor/ physician if you feel unwell.
 P337 + P313 - If eye irritation persists: Get medical advice/ attention.
 P362 + P364 - Take off contaminated clothing and wash it before reuse.
 P403 + P235 - Store in a well-ventilated place. Keep cool.
 P405 - Store locked up.
 P501 - Dispose of contents/ container to an approved waste disposal plant.

3 COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Ingredients:		
CAS#	%	Chemical Name:
124-38-9	0.1-10%	Carbon dioxide (propellant)
79-01-6	40-60%	Trichloroethylene
811-97-2	35-45%	1,1,1,2-Tetrafluoroethane
8029-76-3	<2%	Lecithins, hydroxylated

4 FIRST AID MEASURES

Inhalation: Remove exposed individual to fresh air, protecting yourself. Restore breathing if necessary. Contact a physician.

Skin Contact: Wash with soap and water. Remove any contaminated clothing and launder before reusing. If irritation persists, seek medical attention.

Eye Contact: Flush with warm water for 15 minutes. Seek medical attention.

Ingestion: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

5 FIRE FIGHTING MEASURES

Flash Point: None

LEL: No Information

UEL: No Information

Extinguishing Media:
 Dry chemical, carbon dioxide, halon, or foam is recommended. Water spray may be used to cool containers or structures. Halon may decompose into toxic materials and carbon dioxide will displace oxygen, take proper precautions when using these materials.

Unusual Fire & Explosion Hazards:
 This material may be ignited by extreme heat, sparks, flames or other ignition sources (static electricity). Vapors are heavier than air and will collect in low areas (sewers) or travel considerable distances. If containers are not cooled in a fire, they may rupture and ignite.

Special Fire Fighting Procedures:
 At elevated temperatures (over 130F) aerosol container may burst, vent or rupture; use equipment or shielding to protect personnel. Cooling exposed containers with streams of water may be helpful. Emergency responders should wear self-contained breathing apparatus. Wear other protective gear as conditions warrant. Keep unauthorized people out and try to contain spills or leaks if it can be done safely. Material will float on water, avoid spreading the fire.

6 ACCIDENTAL RELEASE MEASURES

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Spill or Leak Instructions

Contain spill with dikes of soil or nonflammable absorbent to minimize contaminated area. Avoid run-off into storm sewers and ditches leading to waterways. If required, notify state and local authorities. Place leaking containers in well-ventilated area. Clean up small spills by using a nonflammable absorbent or flushing sparingly with water. Contain larger spills with nonflammable diking or absorbent. Clean up by vacuuming or sweeping.

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Assess the spill situation, as the spill may not evolve large amounts of hazardous airborne contaminants in many outdoor spill situations. It may be advisable in some cases to simply monitor the situation until spilled product is removed.

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HANDLING AND STORAGE

Handling Precautions:

Store below 120°F in cool, dry area, out of direct sunlight and away from strong oxidizers. Do not puncture or burst. Use in accordance with good work place practices. Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Decontaminate soiled clothing thoroughly before re-use. Destroy contaminated leather clothing.

Empty containers may contain residues from the product. Treat empty containers with the same precautions as the material last contained. Do not cut, weld or apply heat to empty containers Do not incinerate

Storage Requirements:

Store in a cool, dry area, away form heat or direct sunlight. Keep containers closed when not in use. Do not store with incompatible materials

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

General or dilution ventilation is frequently sufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Use a NIOSH approved respirator if ventilation is not adequate to maintain exposures below TLV levels.

Personal Protective Equipment:

Protective Equipment:

Use synthetic gloves if necessary to prevent excessive skin contact. Do not wear contacts and always use ANSI approved safety glasses or splash shield.

Engineering Controls:

General or dilution ventilation is frequently sufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Use a NIOSH approved respirator if ventilation is not adequate to maintain exposures below TLV levels.

Respiratory Protection:

Use adequate ventilation to maintain exposure limits. If the exposure limits of the products or any of its components is exceeded, an approved organic vapor mask should be used (consult your safety equipment supplier). Above exposure levels an approved self-contained breathing apparatus or airline respirator with full face-piece is required

Other Suggested Equipment:

Eye wash station and emergency showers should be available. Spill containment equipment should be available.

Discretion Advised:

We. take no responsibility for determining what measures are required for personal protection in any specific application. The general information should be used with discretion.

Carbon dioxide (propellant) cas#:(124-38-9) [0.1-10%]

Components with workplace control parameters

TWA 5,000 ppm USA. ACGIH Threshold Limit Values (TLV)
Asphyxia

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STEL Asphyxia	30,000 ppm	USA. ACGIH Threshold Limit Values (TLV)
TWA	10,000 ppm 18,000 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
Exposures under 10,000 ppm to be cited as de minimus.		
STEL	30,000 ppm 54,000 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA	5,000 ppm 9,000 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z- 1 Limits for Air Contaminants
The value in mg/m ³ is approximate.		
TWA	5,000 ppm 9,000 mg/m ³	USA. NIOSH Recommended Exposure Limits
Normal constituent of air (about 300 ppm).		
ST	30,000 ppm 54,000 mg/m ³	USA. NIOSH Recommended Exposure Limits
Normal constituent of air (about 300 ppm).		
Trichloroethylene cas#:(79-01-6) [40-60%]		
Components with workplace control parameters		
TWA	50 ppm 270 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
Skin notation		
STEL	200 ppm 1,080 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
Skin notation		
TWA	100 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z2
Z37.19- 1967		
CEIL	200 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z2
Z37.19- 1967		
Peak	300 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z2
Z37.19- 1967		
TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
Central Nervous System impairment cognitive decrement Renal toxicity Suspected human carcinogen		
STEL	25 ppm	USA. ACGIH Threshold Limit Values (TLV)
Central Nervous System impairment cognitive decrement Renal toxicity Suspected human carcinogen		
Potential Occupational Carcinogen See Appendix C See Appendix A		

1,1,1,2-Tetrafluoroethane cas#:(811-97-2) [35-45%]

Components with workplace control parameters

TWA	1,000 ppm	USA. Workplace Environmental Exposure Levels (WEEL)
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Appearance:	Clear Aerosol	Odor:	Ether like
Viscosity:	NA	Solubility:	Negligible
Boiling Point:	NE	Freezing/Melting Pt.:	NE
Flammability:	NA	Flash Point:	NA (as aerosol)
Partition Coefficient:	NE	Vapor Density:	>1 Air = 1
Vapor Pressure:	>30 psi	Auto-Ignition Temp:	NE
pH:	NE	UFL/LFL:	NE
Evap. Rate:	Ether = 1 Slower		

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STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions to Avoid:	Heat, spark, and open flame.
Materials to Avoid:	Strong Oxidizing Agents.
Hazardous Decomposition:	Combustion will produce Carbon Monoxide, Carbon Dioxide, Hydrocarbons, Chlorine compounds, Hydrogen chloride, and Phosgene.
Hazardous Polymerization:	Will not occur.

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TOXICOLOGICAL INFORMATION

Carbon dioxide (propellant) cas#:(124-38-9) [0.1-10%]

Information on toxicological effects

Acute toxicity:

Oral LD50 no data available

Inhalation LC50

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard: no data available

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Potential health effects: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May cause severe frostbite. May be harmful if absorbed through skin. May cause skin

Eyes May cause eye irritation. Aggravated Acts as a simple asphyxiant by displacing air. , Medical Condition

Signs and Symptoms of Exposure: Nausea, Dizziness, Headache, Low to medium concentrations of carbon dioxide can:, affect regulation of blood circulation, affect the acidity of body fluids, respiratory difficulties, At high concentrations:, Breathing difficulties, Increased pulse rate, change in body acidity, Very high concentrations can cause:, Unconsciousness, death

Synergistic effects: no data available

Additional Information:

RTECS: FF6400000

Trichloroethylene cas#:(79-01-6) [40-60%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 4,920 mg/kg

Inhalation LC50 LC50 Inhalation - mouse - 4 h - 8450 ppm

Dermal LD50 LD50 Dermal - rabbit - > 20,000 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - rabbit - Severe skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit - Eye irritation - 24 h

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: Laboratory experiments have shown mutagenic effects. In vitro tests showed mutagenic effects

Carcinogenicity:

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

IARC: 2A - Group 2A: Probably carcinogenic to humans (Trichloroethylene)

NTP: Reasonably anticipated to be a human carcinogen (Trichloroethylene)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):
May cause damage to organs.

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.

Signs and Symptoms of Exposure: burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Exposure to and/or consumption of alcohol may increase toxic effects., Gastrointestinal disturbance, Kidney injury may occur., narcosis

Synergistic effects: no data available

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Additional Information:

RTECS: KX4550000

1,1,1,2-Tetrafluoroethane cas#:(811-97-2) [35-45%]

Information on toxicological effects

Acute toxicity: no data available

LC50 Inhalation - rat - 4 h - 1,500,000 mg/m3

Dermal: no data available

Skin corrosion/irritation: Skin - rabbit Result: Mild skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit Result: Mild eye irritation

Respiratory or skin sensitisation: - guinea pig Result: Does not cause skin sensitisation.

Germ cell mutagenicity: Ames test S. typhimurium Result: negative

OECD Test Guideline 486 rat - male DNA repair DNA damage

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: KI8842500

May be harmful., Prolonged or repeated exposure to skin causes defatting and dermatitis.

Stomach - Irregularities - Based on Human Evidence

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ECOLOGICAL INFORMATION

Carbon dioxide (propellant) cas#:(124-38-9) [0.1-10%]

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

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Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

Trichloroethylene cas#:(79-01-6) [40-60%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 41 mg/l - 96.0 h.

LOEC - other fish - 11 mg/l - 10.0 d

NOEC - *Oryzias latipes* - 40 mg/l - 10.0 d

Toxicity to daphnia EC50 - *Daphnia magna* (Water flea) - 18.00 mg/l - 48 h.
and other aquatic invertebrates

Toxicity to algae IC50 - *Pseudokirchneriella subcapitata* (green algae) - 175.00 mg/l - 96 h.

Persistence and degradability: Bioaccumulative potential:

Does not bioaccumulate.

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

1,1,1,2-Tetrafluoroethane cas#:(811-97-2) [35-45%]

Information on ecological effects

Toxicity:

Toxicity to fish semi-static test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 450 mg/l - 96 h.
(Directive 67/548/EEC, Annex V, C.1.)

Toxicity to daphnia and static test EC50 - *Daphnia magna* (Water flea) - 980 mg/l - 48 h.
other aquatic (Directive 67/548/EEC, Annex V, C.2.) invertebrates

Toxicity to bacteria Growth inhibition EC50 - *Pseudomonas putida* - > 730 mg/l - 6 h.

Persistence and degradability: Biodegradability aerobic - Exposure time 28 d Result: 3 % - Not readily biodegradable. (OECD Test Guideline 301D)

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available

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DISPOSAL CONSIDERATIONS

Do not puncture or burn containers. Give empty, leaking, or full containers to disposal service equipped to handle and dispose of aerosol (pressurized) containers. Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by

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Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete.

Note that this handling and disposal information may also apply to empty containers, liners and rinsate. State or local regulations or restrictions are complex and may differ from federal regulations. This information is intended as an aid to proper handling and disposal; the final responsibility for handling and disposal is with the owner of the waste. See Section 9 - Physical and Chemical Properties.

14 TRANSPORT INFORMATION

UN1950, Aerosols, non-flammable, (each not exceeding 1 L capacity), 2.2,(6.1)

15 REGULATORY INFORMATION

[%] RQ (CAS#) Substance - Reg Codes

[0.1-10%] Carbon dioxide (propellant) (124-38-9) MASS, OSHAWAC, PA, TSCA, TXAIR

[40-60%] RQ(100LBS), Trichloroethylene (79-01-6) CERCLA, CSWHS, EPCRAWPC, GADSL, HAP, HWRCRA, MASS, NJHS, OSHAWAC, PA, PRIPOL, PROP65, REACH, SARA313, TOXICPOL, TOXICRCRA, TSCA, TXAIR, TXHWL

[35-45%] 1,1,1,2-Tetrafluoroethane (811-97-2) GADSL, TSCA

[<2%] Lecithins, hydroxylated (8029-76-3) TSCA



WARNING

This product can expose you to chemicals including Trichloroethylene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

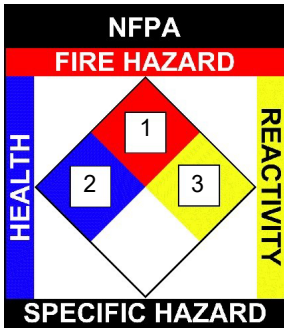
Regulatory Code Legend

RQ = Reportable Quantity
MASS = MA Massachusetts Hazardous Substances List
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level
CERCLA = Superfund clean up substance
CSWHS = Clean Water Act Hazardous substances
EPCRAWPC = EPCRA Water Priority Chemicals
GADSL = Global Automotive Declarable Substance List (GADSL)
HAP = Hazardous Air Pollutants
HWRCRA = RCRA Hazardous Wastes
NJHS = NJ Right-to-Know Hazardous Substances
PRIPOL = Clean Water Act Priority Pollutants
PROP65 = CA Prop 65
REACH = REACH List of Substances of Very High Concern (RSL)
SARA313 = SARA 313 Title III Toxic Chemicals
TOXICPOL = Clean Water Act Toxic Pollutants
TOXICRCRA = RCRA Toxic Hazardous Wastes (U-List)
TXHWL = TX Hazardous Waste List

16 OTHER INFORMATION

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NFPA: Health = 2, Fire = 1, Reactivity = 3, Specific Hazard = n/a



Note:

For industrial use only. The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. We make no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid, or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards. Possession of an SDS does not indicate that the possessor of the SDS was a purchaser or user of the subject product.

Revision Date: 12/2/2022