

Pro-Thaw™ Liquid Dryer

MSDS# CTZ-1, CTZ-16

May 2012

5 Total Pages

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Pro-Thaw Liquid Dryer

Manufactured by: Diversitech

6650 Sugarloaf Parkway, Duluth, GA 30097

Phone: 800-995-2222 (Product Information)

Phone: 800-255-3924 (CHEM-TEL, Chemical Emergencies Only)

Revised: 05/19/2012

Prepared By: Wyatt Coleman

2. HAZARDS IDENTIFICATION



Flammable



Toxic

Recommended Exposure Limits: See Section 8.

Acute Effects of Overexposure:

Eye: May cause mild to moderate irritation. Blindness associated with methanol exposure is the result of systemic toxicity following skin contact, ingestion, or inhalation of high vapor concentrations.

Skin: May cause slight to moderate irritation. Prolonged and repeated skin contact with vapor or liquid has a defatting effect on the skin and may cause dermatitis, drying, cracking, redness, and scaling. Absorption of methanol can occur following dermal contact, and prolonged or massive skin contact can lead to toxic systemic effects.

Inhalation: May cause central nervous system depression with nausea, headache, dizziness, tiredness, delirium. Overexposure may cause metabolic acidosis which cause tissue injury. High vapor concentrations may irritate the lungs resulting in pneumonitis.

Ingestion: May cause weakness, fatigue, dizziness, headaches, nausea, gastrointestinal disturbances, and some degree of inebriation. Methanol poisoning may cause degenerative damage to the kidneys, liver, heart, and other organs due to metabolic acidosis. Death may occur from cardiac of failure and possibly renal failure. If swallowed, may be aspirated resulting in inflammation and possible fluid accumulation in the lungs.

Subchronic and Chronic Effects of Overexposure: Methanol cannot be made nontoxic. The toxicity of methanol depends on the amount that accumulates in the blood. Continuous and repeated high exposures to methanol are expected to exhibit the same effects as noted for acute poisoning with visual impairment being the first sign of poisoning.

Other Health Effects: Methanol has been reported to damage DNA of rats and induce cytogenetic changes in mice following oral and intraperitoneal dosing. Exposure of pregnant rats to methanol by inhalation (20,000 ppm) throughout gestation produced maternal toxicity and malformations in their offspring at maternally toxic exposure levels. Administration of methanol orally (2.5g/kg) to pregnant rats for three days during the later stage of gestation is reported to induce behavioral changes in their progeny, without structural malformation.

First Aid and Emergency Procedures:

Eye: Flush eyes with running water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.

Skin: Wash skin with soap and water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical

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attention.

Inhalation: Immediately remove from exposure. If breathing is difficult, give oxygen. If breathing ceases, administer artificial respiration followed by oxygen. Seek immediate medical attention.

Ingestion: POISON! Call a physician, or the nearest poison control center. Seek immediate medical attention before inducing vomiting.

Note to Physician: Ethanol may be used as antidote for methanol poisoning. The blood ethanol level should be in the range of 1 to 1.5 mg/L.

Pro-Thaw MSDS

Note to Emergency Responder: Induce vomiting under medical supervision due to possibility of aspiration into lungs.

3. COMPOSITION / INFORMATION INGREDIENTS

INGREDIENT	CAS No.	EINECS No.	% or RNG	Hazard Symbol	Risk Phrases
Methanol	67-56-1	200-659-6	100%	F, T	R 11, R 23/24/25,

4. FIRST-AID MEASURES

Eye: Flush eyes with running water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.

Skin: Wash skin with soap and water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.

Inhalation: Immediately remove from exposure. If breathing is difficult, give oxygen. If breathing ceases, administer artificial respiration followed by oxygen. Seek immediate medical attention.

Ingestion: POISON! Call a physician, or the nearest poison control center. Seek immediate medical attention before inducing vomiting.

Note to Physician: Ethanol may be used as antidote for methanol poisoning. The blood ethanol level should be in the range of 1 to 1.5 mg/L.

Note to Emergency Responder: Induce vomiting under medical supervision due to possibility of aspiration into lungs.

5. FIREFIGHTING MEASURES

Flammable Limits (% by Volume in Air): LEL - 6.0 UEL - 36.5

Extinguishing Media: Dry chemical, alcohol, foam, carbon dioxide (CO₂), water spray or any Class B extinguishing agent .

Special Fire Fighting Procedures: Evacuate area of all unnecessary personnel. Shut off source, if possible. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments described in Section III if conditions warrant. Water fog or spray may be used to cool exposed containers and equipment.

Fire and Explosion Hazards: Carbon oxides formed when burned. Highly flammable vapors which are heavier than air may accumulate in low areas and/or spread along ground away from handling site. Closed containers exposed to heat may rupture.

6. ACCIDENTAL RELEASE MEASURES

Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments described in Section III if exposure conditions warrant. Shut off source, if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in dry, inert material (sand, clay, "Oil-Dri", vermiculite, etc.). Transfer to disposal drums using non-sparking equipment. Use water spray to reduce vapors.

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7. HANDLING AND STORAGE

Do not get in eyes, on skin or on clothing. Do not breathe vapors, mist, fume or dust. Do not swallow. May be fatal. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Wash thoroughly after handling. Launder contaminated clothing before reuse. Use only with adequate ventilation. Store in a well-ventilated area. Keep away from heat, sparks, and flames. Keep container closed when not in use.

8. EXPOSURE CONTROLS /PERSONAL PROTECTION

OSHA-PEL: 200 ppm TWA; 260 mg/m³ TWA (Methanol)

TLV: 200 ppm (Methanol)

Ventilation: Use adequate ventilation to control exposure below recommended levels.

Respiratory Protection: For concentrations exceeding the recommended exposure level, use IOSH/MSHA approved air purifying respirator. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator. If conditions immediately dangerous to life or health (IDLH) exist, use NIOSH/MSHA approved self-contained breathing apparatus (SCBA) equipment.

Eye Protection: For splash protection use chemical goggles and face shield.

Skin Protection: Use neoprene gloves and protective garments to prevent skin contact.

NOTE: Personal protection information shown in Section III is based on general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

9. PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance: Clear, Colorless Liquid

Odor: Slight Alcohol Odor

Odor threshold: N/A

pH: N/A

Melting Point: N/A

Boiling Point: 148F (65C)

Flash Point (Method Used): 52°F (16°C) (ASTM D56, TCC)

Evaporation Rate (Ether = 1): <1

Flammability (Solid, gas): N/A

Upper/lower flammability or explosive limits: 6-36°C

Vapor pressure (mm Hg): 96 mm Hg at 68F (20C)

Vapor Density (Air=1): 1.11

Specific gravity (H₂O = 1): 0.7910

Solubility in water: Negligible; Completely Miscible

Partition coefficient: N/A

Auto-ignition temperature: N/A

Decomposition temperature: N/A

NA= Data not available

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Not Applicable

Incompatibility (Materials to Avoid): Anhydrides, sodium, organometallic compounds, oxygen and strong oxidizing agents

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Hazardous Polymerization: Will Not Occur

Hazardous Decomposition Products: Carbon oxides formed when burned.

11. TOXICOLOGICAL INFORMATION

LD/LC50 values that are relevant: LD50: ORL-RAT, 5628 mg/kg (Methanol) Carcinogenicity Classification: IARC (International Agency for Research on Cancer) – Not Listed NTP (National Toxicology Program) - Not Listed

Eye: Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Ingestion of Methanol can be fatal or cause blindness if swallowed.

Inhalation: Harmful if inhaled. May cause adverse central nervous system effects including headache and convulsions.

Chronic: Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Prolonged exposure may cause liver, kidney, and heart damage.

Additional toxicological information: Any toxin(s) present in this kit are at concentration levels below the regulatory threshold limits which require registration under the Select Agent Program in as detailed in 42 CFR Part 73, 9 CFR Part 121, and 7 CFR Part 331.

12. ECOLOGICAL INFORMATION

Ecotoxicity Tests: LC50: Fish, 96 hours, 19,000 mg/L (Methanol)

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with all applicable federal (40 CFR 261.3), state, and local environmental regulations.

RCRA P-Series: None listed.

RCRA U-Series: CAS# 67-56-1: waste number U154; (Ignitable waste) Contact a licensed professional waste disposal service to dispose of this material if questions arise.

14. TRANSPORT INFORMATION

US DOT Shipping Name: Flammable Liquid, Toxic, N.O.S. (Contains methanol)

Hazard Class: 3 (Flammable liquid)

ID Number: UN 1992

Packing Group: II

Label: 3

Hazardous Substance/RQ: Methanol/5000#

Shipping Description: UN 1992 Flammable Liquid, Toxic, N.O.S 3 (contains methanol), , PG II

Land Transport ADR/RID (cross-border): Hazard Class: 3 Identification Number: UN 1230 Packing Group: II Proper Shipping Name: Methanol

Maritime Transport IMDG: Hazard Class: 3 Identification Number: UN 1230 Packing Group: II Proper Shipping Name: Methanol

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15. REGULATORY INFORMATION



Flammable



Toxic

Risk Phrases:

R11: Highly flammable.

R 23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

R39: Toxic, danger of very serious irreversible effects through inhalation.

16. OTHER INFORMATION

HMIS Ratings

HEALTH: 3

FLAMMABILITY: 3

REACTIVITY: 0

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