

SDS PRO-THAW-1-GB, PRO-THAW-GB Issue 1, Version 3 Revised 28 August 2017 **Total Pages: 5**

Pro-Thaw™ Liquid Dryer

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Pro-Thaw™ PRO-THAW-1. PRO-THAW

1.2 Relevant identified uses of the substances or mixture and of the company/undertaking

1.3 Details of the supplier of the safety data sheet

Manufactured by (USA): DiversiTech Corporation

6650 Sugarloaf Parkway

Duluth, GA 30097

Manufactured for (UK): Pump House Glaisdale Drive East

Nottingham NG8 4LY United Kingdom Tel: +44 1159005858 Fax: +44 1159294468 Email: www.pumph.co.uk.com

1.4 Emergency telephone number

Emergency tel: 001 +1813 248 0585, 24 Hours, 7 Emergency Days, Chem-Tel, Inc.

SECTION 2. HAZARDOUS IDENTIFICATION

2.1 Classification of the mixture

GHS Classification:

Flammable liquid Category 2 Acute Toxicity, Oral Category 3 Acute Toxicity, Inhalation Category 3 Acute Toxicity Dermal Category 3 Specific Target Organ Toxicity- Single Exposure Category 1

2.2 Label Elements:







Signal Word:

H311

Danger!

Hazard Statement(s)

H225 Highly flammable liquid and vapor H301 Toxic if swallowed, Toxic in contact with skin

H331 Toxic if inhaled

H370 Causes damage to organs: eyes, skin, respiratory system, central nervous system, gastrointestinal tract.

Precautionary Statement(s)

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking

P233 Keep container tightly closed.

P241 Use explosion-proof electrical, ventilating, lighting, and equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe vapors.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.

P280 Wear rubber, nitrile or neoprene protective gloves and clothing, and safety goggles or face shield to protect eyes and face.



Pro-Thaw™ Liquid Dryer

SECTION 2. HAZARDOUS IDENTIFICATION (cont.)

P303+352	IF ON SKIN (or hair): Rinse skin with water or shower.
P312	Call a poison center or doctor if you feel unwell.
P361+364	Take off immediately all contaminated clothing and wash it before reuse.
P301+310	IF SWALLOWED: Immediately call a poison center or doctor if you feel unwell.
P330	Rinse mouth.
P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+311	IF exposed or concerned: Call a POISON CENTER or doctor.
P370+378	IN CASE OF FIRE: Use foam or Carbon dioxide extinguishing media to extinguish.
P403+235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents to appropriate facility in accordance with Federal. State, and local regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

NGREDIENT	CAS No.	EINECS No.	% or Range	GHS Classification	
Methanol	67-64-1	200-659-6	100	H225: Highly flammable Liquid and vapour	Category 2
				H301: Toxic if swallowed H311: Toxic if comes in	Category 3
				Contact w/skin	Category 3
				H331: Toxic if inhaled	Category 3

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

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.

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

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

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.

4.2. Signs and Symptoms of Exposure:

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 ofailure and possibly renal failure. If swallowed, may be aspirated resulting in inflammation and possible fluid accumulation in the lungs.

Skin Contact: 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.

Eye Contact: 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.

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 cytogentic 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.

SECTION 5. FIREFIGHTING MEASURES

5.1 Suitable and Unsuitable Extinguishing Media

Dry chemical, alcohol, foam, carbon dioxide (CO2), water spray or any Class B extinguishing agent .may be flammable.

5.2 Special Equipment and Precautions for Fire-Fighters

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. 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.



Pro-Thaw™ Liquid Dryer

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: 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.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling: 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.

7.2 Conditions for Safe Storage, Including any Incompatibilities: 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Airborne Exposure Limits:

Methanol:

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

TLV: 200 ppm

8.2 Appropriate Engineering Controls:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, <u>Industrial Ventilation</u>, <u>A Manual of Recommended Practices</u>, most recent edition, for details.

Personal Respirators: 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.

Skin Protection: Use rubber, neoprene or nitrile gloves to minimize skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. A source of running water or other eyewash provisions should be nearby.

Work Hygienic Practices: Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material, and before eating, smoking or using the bathroom.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Clear colorless liquid Odor: Slight Alcohol odor Odor Threshold: Not established pH @ 25°C: Not applicable

Melting Point (Pour Point): Not applicable

Boiling Point: 65°C/148°F

Flash Point: 52°F (16°C) (ASTM D56, TCC) Evaporation Rate (Water = 1): <1 Flammable Limits: No data for mixture Specific gravity (H2O = 1): 0.7910

Solubility in water: Negligible; Completely Miscible
Octanol/Water Partition Coefficient: Not available
Autoignition Temperature: Not available
Decomposition Temperature: Not available

LEL: -6.0 (% by volume) **UEL:** - 36.5 (% by volume)

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

Vapor Density (Air = 1): 1.11

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable

10.2 Chemical Stability

Stable

10.3 Possibility of Hazardous Reactions

Will not occur.

10.4 Conditions to Avoid

Do not mix with other chemicals.

10.5 Incompatible Materials

Anhydrides, sodium, organometallic compounds, oxygen and strong oxidizing agents.

10.6 Hazardous Decomposition Products

Carbon oxides formed when burned.



Pro-Thaw™ Liquid Dryer

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Acute Toxicity:

Oral: LD50, Rat: 5,628 mg/kg Inhalation: LC50, Rat: 64,000 ppm Dermal: LD50, Rabbit: 15,800 mg/kg

11.1.2 Irritation: Causes eye irritation 11.1.3 Corrosive: Not Corrosive 11.1.4 Sensitisation: No data.

11.1.5 Repeated dose toxicity: Prolonged and repeated exposure to skin may cause defatting of skin and dermatitis.

11.1.6 Carcinogenicity: No data. **11.1.7 Mutagenicity:** No data.

11.1.8 Toxicity for reproduction: No data.

11.1.9 Route of exposure: Skin contact, Inhalation, Ingestion

11.1.10 Specific Organ Toxicity - Single exposure: May cause drowsiness or dizziness.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

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

12.2 Persostence and degradability

No data available

12.3 Bioacummulative potential

No data available

12.4 Mobility in soil

From soil, substance evaporates and is microbially biodegraded.

12.5 Results of PBT and vPvB assessment

This substance is not identified as a PBT substance.

12.6 Other adverse effects

None

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 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.

SECTION 14. TRANSPORTATION INFORMATION

14.1 UN number

UN 1992

14.2 UN proper shipping name

Flammable Liquid, Toxic, N.O.S (contains Methanol)

14.3 Transport hazard class(es)

Class 3

14.4 Packing group

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14.5 Environmental hazards

Environmentally Hazardous Substance

14.6 Special precautions for user

See section 8

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable to packaged goods



Pro-Thaw™ Liquid Dryer

SECTION 14. TRANSPORTATION INFORMATION (cont.)

Mode-specific information:

ROAD/RAIL (ADR/RID/CDG) Transport category 3

Tunnel restriction code D/E

SEA (IMDG) Marine Pollutant

EmS: F-E, S-D

Limited Quantities: 1 L

AIR (ICAO/IATA) ERG Code 3HP

15. REGULATORY INFORMATION

15.1 Chemical safety assessment

The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

15.2 Chemical safety assessment

A chemical safety assessment has not been conducted.

SECTION 16. OTHER INFORMATION

Other information

This safety data sheet is prepared in accorance with Regulation (EU) No 1272/2008 (CLP).

Revision Summary: All Sections: New GHS Format

Abbreviations

UN Model Regulations means the Model Regulations annexed to the most recently revised edition of the Recommendations on the Transport of Dangerous Goods published by the United Nations.

IMDG Code means the International Maritime Dangerous Goods code, as amended.

ADR means the European Agreement concerning the International Carriage of Dangerous Goods by Road, as amended.

RID means the Regulations concerning the International Carriage of Dangerous Goods by Rail, as amended.

ADN means the European Agreement concerning the International Transport of Dangerous Goods by Inland Waterways, as amended.

Sources of Key Data:

UK Regulatory References: The Control of Substances Hazardous to Health Regulations 2002 (as amended 2004).

European Regulation (EC) No. 1272/2008 on classification, labeling and packaging of substances and mixtures.

Approved Code of Practice: Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. British Workplace Exposure Limits EH40.

Classification and Labelling Guidance: Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Annex 2

Precautionary Statement and Pictograms: Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Annex 3 Guidance on the Preparation of Safety Data Sheets: Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Annex 4

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