

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 810
Product name T-LUBE Dry PTFE Lubricant & Release Agent
Effective date 06-Feb-2013
Company information Ricmar Industries
889 N. Larch
Elmhurst, IL 60126 United States
Company phone General Assistance 800-323-0779
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 06
Supersedes date 07-May-2012

2. Hazards Identification

Emergency overview Aerosol. EXTREMELY FLAMMABLE
CONTENTS UNDER PRESSURE. Will be easily ignited by heat, spark or flames.
Irritating to respiratory system. Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact.

Eyes Health injuries are not known or expected under normal use. Eye contact may result in corneal injury.

Skin Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs Central nervous system. Lungs.

Chronic effects Unconsciousness. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage. Prolonged skin contact may defat the skin and produce dermatitis.

Signs and symptoms Discomfort in the chest. Narcosis. Cyanosis. Defatting of the skin. Irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Propane	74-98-6	20 - 30
n-Butane	106-97-8	20 - 30
Aliphatic Petroleum Solvent	64742-89-8	20 - 30
Acetone	67-64-1	10 - 15
Ethyl Alcohol	64-17-5	3 - 5
Non-hazardous and other components below reportable levels		2.5 - 10

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Skin contact Immediately take off all contaminated clothing. Wash off with warm water and soap. Get medical attention if irritation develops or persists.

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Call a physician if symptoms develop or persist.
Ingestion	If material is ingested, immediately contact a poison control center. Have victim rinse mouth thoroughly with water. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Notes to physician	Symptoms may be delayed.

5. Fire Fighting Measures

Flammable properties	Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.
Extinguishing media	
 Suitable extinguishing media	Alcohol foam. Dry chemical. Carbon dioxide (CO2). Do not use water jet.
Protection of firefighters	
 Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
 Protective equipment and precautions for firefighters	In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. Accidental Release Measures

Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. Avoid dust formation.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Do not smoke while using or until sprayed surface is thoroughly dry. Do not use if spray button is missing or defective. Use only with adequate ventilation. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure.
Storage	Level 3 Aerosol. Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat, sparks, and flame. Avoid exposure to long periods of sunlight. Store in cool place. Keep container tightly closed. Keep in an area equipped with sprinklers. Keep out of the reach of children. Level 3 Aerosol. Do not store, incinerate, or heat this material above 120 degrees Fahrenheit.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Propane	74-98-6	1000 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Acetone	67-64-1	500 ppm	750 ppm	Not established
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Propane	74-98-6	1000 ppm	Not established	Not established
Acetone	67-64-1	1000 ppm	Not established	Not established
Ethyl Alcohol	64-17-5	1000 ppm	Not established	Not established

Personal protective equipment

Eye / face protection	Wear chemical goggles.
Skin protection	Wear appropriate chemical resistant clothing. Protective gloves.
Respiratory protection	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Boiling point	77 °F (25 °C) estimated
Color	Tan.
Density	0.6264 g/cm ³ estimated
Flammability (HOC)	37.9416 kJ/g estimated
Flash back	Yes
Flash point	-156 °F (-104.4 °C) Propellant
Form	Liquid. Aerosol.
Freezing point	Not available
Odor	None known.
pH	Not applicable
Physical state	Liquid.
Pressure	55 - 70 psig @70°F
Solubility	Partially
Specific gravity	0.6265 estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological Information

Acute effects	Acute LD50: 12472 mg/kg estimated, Rat, Dermal Acute LC50: 340 mg/l/4h estimated, Rat, Inhalation
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Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

Acetone	67-64-1	Oral LD50 Rat 5800 mg/kg
Aliphatic Petroleum Solvent	64742-89-8	Oral LD50 Mouse 5000 mg/kg; Dermal LD50 Rabbit 3000 mg/kg
Ethyl Alcohol	64-17-5	Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h
n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h

Sensitization	Not expected to be hazardous by OSHA criteria.
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Carcinogenicity

IARC - Group 1 (Carcinogenic to Humans)

Ethyl Alcohol

64-17-5

Monograph 100E [2012] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages)

Teratogenicity

Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity

Components of this product have been identified as having potential environmental concerns.

LC50 31781 mg/L, Fish, 96.00 Hours,
EC50 74496 mg/L, Daphnia, 48.00 Hours,
IC50 21311 mg/L, Algae, 72.00 Hours,

13. Disposal Considerations

Waste codes

D001: Waste Flammable material with a flash point <140 F

Disposal instructions

Contents under pressure. Dispose of this material and its container at hazardous or special waste collection point. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name Aerosols

Hazard class 2.1

UN number UN1950

Additional information:

Special provisions 153, N82

Packaging exceptions LTD QTY

Packaging non bulk None

Packaging bulk None

Further information

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2013, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/13 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.



IMDG

Basic shipping requirements:

Proper shipping name AEROSOLS

Hazard class 2.1

UN number 1950

Additional information:

Packaging exceptions LTD QTY

Item 5F

Labels required None

Transport Category 2



IATA**Basic shipping requirements:**

Proper shipping name Aerosols, flammable
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Labels required None



15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Acetone: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Hazard categories (311/312) Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - Yes
 Reactivity Hazard - No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

U.S. - Pennsylvania - RTK (Right to Know) List

Chemical	Inventory ID	Inventory Status
Acetone	67-64-1	Environmental hazard
Aliphatic Petroleum Solvent	64742-89-8	Present
Ethyl Alcohol	64-17-5	Present
n-Butane	106-97-8	Present
Propane	74-98-6	Present

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 1*
 Flammability: 4
 Physical hazard: 0

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MSDS sections updated Product and Company Identification: Product Review
 Transport Information: Further information

