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### MATERIAL SAFETY DATA SHEET

### **SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Product identifier : LUBRI-CLEAN

Product Code(s) : None reported.

Product Use : Uncured foam cleaner.

**Chemical Family**: Mixture of: Ketones; Petroleum distillates; Hydrocarbon propellant.

Supplier's name and address: Manufacturer's name and address:

Rivenco Industries Ltd. Refer to Supplier

45 Pine Ridge Road Erin, ON, Canada N0B 1T0

Information Telephone No. : (519) 833-0544 (8 AM to 5 PM EST, Monday to Friday)

24 Hr. Emergency Tel # : (613) 996-6666 (CANUTEC)

#### **SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS OSHA PEL ACGIH TLV TWA STEL PEL STEL** Ingredients % (weight) CAS# stoddard solvent 500 ppm 0.50 - 1.50 100 ppm N/Av N/Av 8052-41-3 Acetone 70.00 - 100.00 67-64-1 500 ppm 750 ppm 1000 ppm N/Av A70 Hydrocarbon propellant 10.00 - 20.00 \*1000 ppm N/Av 68476-86-8 \*1000 ppm N/Av

## **SECTION 3 - HAZARDS IDENTIFICATION**

## **EMERGENCY OVERVIEW**

Aerosolized, clear liquid. Aromatic odour.

DANGER!

Flammable aerosol. Contents under pressure. Container may explode if heated. Vapour may cause flash fire!

Harmful or fatal if swallowed. Can enter the lungs and cause damage.

May be harmful if inhaled. May cause respiratory irritation.

May cause nausea, vomiting, headache and other central nervous system effects.

Causes eye irritation. Prolonged or repeated skin contact may cause drying and irritation.

### \*\*\*POTENTIAL HEALTH EFFECTS\*\*\*

Target organs : Eyes, skin, respiratory system, digestive system, central nervous system.

Routes of exposure : Inhalation: YES Skin Absorption: NO Skin & Eyes: YES Ingestion: YES

Signs and symptoms of short-term (acute) exposure

Inhalation: May cause irritation to the nose, throat and upper respiratory tract. Symptoms may include pain,

headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing

and pulse rates, fatigue and unconsciousness.

Skin : May cause mild skin irritation. If product is sprayed directly on skin, symptoms of frostbite may be

experienced including numbness, prickling and itching.

Eyes : Causes severe eye irritation. If product is sprayed directly into the eyes, could cause freezing of the

eye.

Ingestion: May cause irritation of mouth, throat, and stomach. Symptoms may include pain, headache,

nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Product may present an aspiration hazard, if ingested in large amounts, causing life-threatening lung injury. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical

pneumonitis, which can be fatal.

Effects of long-term (chronic) exposure

 Prolonged or repeated skin contact may cause drying and irritation. Prolonged overexposure may cause liver and kidney effects.

Conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory disorders.

Carcinogenic status : See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards : See TOXICOLOGICAL INFORMATION, Section 11.

<sup>\*</sup>Note: The ACGIH TLV listed above for A70 Hydrocarbon propellant, is for 'Aliphatic hydrocarbon gases'. The OSHA PEL listed above for A70 Hydrocarbon propellant, is for 'L.P.G. (liquefied petroleum gas)'.

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Potential environmental effects

: See ECOLOGICAL INFORMATION, Section 12.

# **SECTION 4 - FIRST AID MEASURES**

Inhalation : If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified

medical personnel only. If breathing has stopped, give artificial respiration. Get

medical attention.

Skin contact: Remove contaminated clothing. Wash affected areas with soap and water. Wash

contaminated clothing before re-use. If irritation persists, seek prompt medical

attention.

Eye contact : Immediately flush eyes with running water for at least 15 minutes. Seek immediate

medical attention/advice.

Ingestion : Do not induce vomiting. Obtain medical attention immediately. Never give anything by

mouth to an unconscious person. If vomiting occurs spontaneously, keep victim's

head lowered (forward) to reduce the risk of aspiration.

Notes For Physician : Treat symptomatically. This product is a CNS depressant.

#### **SECTION 5 - FIRE FIGHTING MEASURES**

#### Fire hazards/conditions of flammability

: Flammable aerosol. Closed containers are contained under pressure and may explode if exposed to excess heat for a prolonged period of time. Vapours may cause flash fire. Vapours are heavier than air and collect in confined and low-lying areas. Vapour can travel to ignition source and flash back.

#### Flammability classification (OSHA 29 CFR 1910.1200)

: Flammable aerosol.

Flash point : - 104.4°C / - 156°F (propellant); - 18°C / 0°F (Acetone)

Flash point Method : N/Av Auto-ignition temperature : N/Av

Lower flammable limit (% by vol.)

Upper flammable limit (% by vol.)

: N/Av

Oxidizing properties : None.

Flame Projection Length : N/Av Flashback observed : N/Av

Explosion data: Sensitivity to mechanical impact / static discharge

: Not expected to be sensitive to mechanical impact. May be sensitive to static discharge. Mixtures of vapour and air at concentrations in the flammable range may

be ignited by a static discharge of sufficient energy.

Suitable extinguishing media : Use water fog or fine spray, foams, carbon dioxide or dry chemical. Do not use a solid

water stream as it may scatter and spread fire.

#### Special fire-fighting procedures/equipment

: Fight fires from a safe distance. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Shield personnel to protect from venting or rupturing containers. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

Hazardous combustion products

: Carbon oxides and other irritating fumes and smoke.

NFPA Rating 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

: Health: 2 Flammability: 3 Instability: 1 Special Hazards: None

# SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by

trained personnel only. Individuals involved in the cleanup must wear appropriate personal protective equipment. For personal protection see section 8. Keep all other

personnel upwind and away from the spill/release.

: Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

For large spills, dike the area to prevent spreading.

Spill response/cleanup: Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Use only non-sparking tools and equipment in the clean-up process.

Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section

13). Notify the appropriate authorities as required.

Prohibited materials : Do not use combustible absorbents, such as sawdust.

Special spill response procedures

**Environmental precautions** 

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: In case of a transportation accident, in the United States contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887. If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002). US CERCLA Reportable quantity (RQ): Acetone (5000 lbs. / 2270 kg).

### **SECTION 7 - HANDLING AND STORAGE**

Safe Handling procedures

: Use only in well-ventilated areas. Wear suitable protective equipment during handling. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not puncture or incinerate containers. Keep away from heat, sparks, and open flames. Use only non-sparking tools with this material. Avoid contact with incompatible materials. Bond and ground transfer containers and equipment. Keep containers tightly closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Storage requirements

Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area. Storage facilities should be made of fire resistant materials. For large-scale storage, use a grounded, non-sparking ventilation system, approved explosion-proof equipment and intrinsically safe electrical systems.

Incompatible materials
Special packaging materials

Strong oxidizing agents; Alkalies; Halogenated compounds; Reducing agents.
 Always keep in containers made of the same materials as the supply container.

# SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Ventilation and engineering measures

: Ensure adequate ventilation, especially in confined areas. An explosion-proof local exhaust system is acceptable.

Respiratory protection

: Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Advice should be sought from respiratory protection specialists.

Skin protection

: Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.

Eye / face protection

Chemical splash goggles are recommended. A full face shield may also be

nec

Other protective equipment

Wear long sleeved clothing, such as a lab coat, to prevent skin contact. An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

: Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

Permissible exposure levels

: For individual ingredient exposure levels, see Section 2.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Aerosol Appearance : Aerosolized, clear liquid.

Odour : Aromatic solvent Odour threshold : N/Av

odour.

pH : N/Av

Boiling point : - 31.7°C / - 25°F Specific gravity : 0.79 (Acetone)

(propellant)

Melting/Freezing point : -94.4°C / -137.92°F Coefficient of water/oil distribution

(Acetone) : N/Av ° F) Solubility in water : 100%

Vapour pressure (mmHg @ 20° C / 68° F)

: 70 psig (483 kPa) @ 21.1°C / 70°F

(propellant)

Vapour density (Air = 1) : 1.77 (propellant) Evaporation rate (n-Butyl acetate = 1)

: >1

Volatile organic Compounds (VOC's)

Volatiles (% by weight) : N/Av

: N/Av

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### **SECTION 10 - REACTIVITY AND STABILITY DATA**

Stability and reactivity : Stable under the recommended storage and handling conditions prescribed.

Product may form carbon monoxide on standing in direct sunlight.

Closed containers may build up pressure when exposed to heat and flame.

Hazardous polymerization

: Hazardous polymerisation does not occur.

Conditions to avoid

Keep away from excessive heat, open flames, sparks and other possible sources of

ignition.

Avoid contact with incompatible materials.

#### Materials To Avoid And Incompatibility

: Incompatible materials (see Section 7).

### Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

### **SECTION 11 - TOXICOLOGICAL INFORMATION**

Toxicological data

: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

	LCso(4hr)	LD50		
<u>Ingredients</u>	<u>inh, rat</u>	<u>oral</u>	dermal	
stoddard solvent	> 5500 mg/m³	> 5000 mg/kg (rat)	> 3000 mg/kg (rabbit)	
Acetone	30,000 ppm	5800 mg/kg (rat)	> 16,000 mg/kg (rabbit)	
A70 Hydrocarbon propellant	N/Av	N/Ap	N/Ap	

Carcinogenic status : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects: Not expected to have other reproductive effects.

**Teratogenicity**: Not expected to be a teratogen.

**Mutagenicity**: Not expected to be mutagenic in humans.

**Epidemiology**: Not available.

Sensitization to material : Not expected to be a skin or respiratory sensitizer.

Synergistic materials : Not available.

Irritancy: Severe eye irritant. Mild skin irritant.

other important hazards : CNS depression may result from extreme exposures.

### **SECTION 12 - ECOLOGICAL INFORMATION**

Environmental effects : The ecological characteristics of this product have not been fully investigated.

The product should not be allowed to enter drains or water courses, or be deposited

where it can affect ground or surface waters.

Important environmental characteristics

: No information available.

**Ecotoxicological**: No data is available on the product itself.

# **SECTION 13 - DISPOSAL CONSIDERATIONS**

**Handling for Disposal** : See Section 7 (Handling and Storage) for further details.

Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Do not puncture or incinerate containers.

Methods of Disposal : Dispose in accordance with all applicable federal, state, provincial and local

regulations. Contact your local, state, provincial or federal environmental agency for

specific rules.

RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the

criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste

identification and disposal method.

### **SECTION 14 - TRANSPORTATION INFORMATION**

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Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label			
TDG	UN1950	AEROSOLS	2.1	none	2			
TDG Additional information	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass. Under the TDGR, refer to Section 1.17 for additional exemption information, if shipping under this exemption.							
49CFR/DOT	UN1950	Aerosols	2.1	none	2			
49CFR/DOT Additional	For limited quantity shipping information, refer to 49 CFR Section 173.306.  Marine pollutant: None.							

### **SECTION 15 - REGULATORY INFORMATION**

#### **US Federal Information:**

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): Acetone (5000 lbs / 2270 kg).

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Fire Hazard; Pressurized gas hazard; Immediate (Acute) health hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

### US State Right to Know Laws:

New Jersey Labeling Requirements: This product contains the following substances required to be disclosed on product labeling: acetone (CAS # 67-64-1; 70 - 100%); A70 Hydrocarbon propellant (CAS # 68476-86-8; 10 - 20%); stoddard solvent (CAS # 8052-41-3; 0.5 - 1.5%).

California Proposition 65: To the best of our knowledge, this product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Acetone (CA, MA, MN, NJ, PA, RI); stoddard solvent (CA, MA, MN, NJ, PA, RI).

### **International Information:**

Canadian WHMIS Classification:

Class A (Pressurized containers);

Class B5 (Flammable Aerosols);

Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

HMIS Rating : \*- Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

Health: \*2 Flammability: 4 Reactivity:

Legend : ACGIH: American Conference of Governmental Industrial Hygienists

CA: California

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

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of 1980

CFR: Code of Federal Regulations DOT: Department of Transportation EPA: Environmental Protection Agency

HMIS: Hazardous Materials Identification System HSDB: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer

Inh: Inhalation

LC: Lethal Concentration

LD: Lethal Dose MA: Massachusetts MN: Minnesota N/Ap: Not Applicable N/Av: Not Available

NFPA: National Fire Protection Association

NIOSH: National Institute of Occupational Safety and Health

NJ: New Jersey

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PA: Pennsylvania

PEL: Permissible exposure limit

RCRA: Resource Conservation and Recovery Act

RI: Rhode Island

RTECS: Registry of Toxic Effects of Chemical Substances SARA: Superfund Amendments and Reauthorization Act

STEL: Short Term Exposure Limit

TDG: Canadian Transportation of Dangerous Goods Act & Regulations

TLV: Threshold Limit Values TSCA: Toxic Substance Control Act TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System

References

- 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2008.
- 2. International Agency for Research on Cancer Monographs, searched 2008.
- 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2008

(Chempendium and RTECs).

- 4. Material Safety Data Sheet from manufacturer.
- 5. US EPA Title III List of Lists October 2006 version.
- 6. California Proposition 65 List December 19, 2008 version.

### Prepared for:

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