1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:

Dry Graph Lube #101

Recommended Use:

Company:

ZIRCON INDUSTRIES, INC.

4920 Commerce Pkwy. CLEVELAND, OHIO 44128 (216) 595-0200

Phone:

Emergency Phone:

(800)535-5053

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

HIGHLY FLAMMABLE LIQUID AND VAPOR.

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

CAUSES SKIN IRRITATION

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE DAMAGE.

MAY CAUSE DROWSINESS OR DIZZINESS.

CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED

EXPOSURE.

HAZARD CLASS		HAZARD CATEGORY
FLAMMABLE LIQUID		2
SKIN IRRITATION		2
SERIOUS EYE DAMAGE	£	1
SKIN SENSITIZATION		1
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE		3
SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE		1
ASPIRATION HAZARD		1

Pictogram(s):



Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces — no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe vapors, mist or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.

Response.

IF SWALLOWED: Immediately call a Poison Center or doctor/physician. If on skin (or hair): Immediately take off all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to remove. Continue rinsing. Immediately call a poison control center or physician. DO NOT INDUCE vomiting. If skin irritation or rash occurs: Get medical attention. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish. Storage: Store in a well-ventillated place. Keep container tightly closed. Keep cool Disposal: Dispose of contents and/or container in accordance to Federal, State/Provincial and Local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910:1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS Number	Hazardous Component	Concentration
67-63-0	2-Propanol	>50
7782-42-5	Graphite	<50
71-36-3	n-Butyl Alcohol	<2
107-98-2	1-Methoxy -2-propanol	<2

As per 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage of composition may have been withheld.

4. FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for 15 minutes. Get medical attention.

Skin: Remove contaminated clothing. Flush skin with plenty of soap and water for several minutes. Get medical attention. Wash clothing before reuse.

Inhalation: Move to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Seek immediate medical attention. DO NOT induce vomiting.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing-Media: Use dry chemical, water spray (FOG), foam or carbon dioxide. **Unsuitable Extinguishing Media:** Avoid solid water stream, may spread fire.

Specific Hazards Arising from Chemical: Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposing products may include Carbon dioxide and Carbon monoxide.

Protective Equipment and Precautions for Firefighters: Fire-Fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Put on appropriate personal protective equipment.

Environmental Precautions: Prevent from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods for Containment: Stop leak if no risk involved using booms or sand.

Methods for Cleanup: Cover liquid spill with sand, earth or other noncombustible absorbent material. Pick up and transfer to properly labeled container.

7. HANDLING AND STORAGE

Handling Procedures: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not ingest. Do not get into eyes or on skin or clothing. Avoid breathing vapors or mist. Use only with adequate ventilation.

Shipping and Storage: Keep container in a dry and well-ventilated area. Keep away from heat. Protect from light. Keep in properly labeled containers.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Component Exposure Limits: Caution should be taken to prevent aerosolization or misting of this product. Oil mist if generated is considered hazardous according to OSHA Hazard Communication Standard. When mist/aerosols can occur the following are recommended: 5 mg/m³ - ACGIH TLV (inhalable fraction), 5 mg/m³ - OSHA PEL

Engineering Controls: Use in adequate ventilation or other engineering controls to keep worker exposure to airborne contaminates below any recommended or statutory limits.

Eye/Face Protection: Splash proof chemical goggles recommended to protect against splash of product.

Skin Protection: Protective gloves recommended when prolonged skin contact cannot be avoided. The following glove materials are acceptable: Polyethylene; Neoprene; Nitrile; Viton. **Respiratory Protection:** Concentration in air determines protection required. Use only NIOSH certified respiratory protection. Respiratory protection usually not needed unless product is heated or misted.

General Hygiene: Wash hands, forearms and face thoroughly after handling chemical products. Appropriate techniques should be used to remove contaminated clothing. Practice good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black Physical State: Liquid
Odor: Alcohol Odor Threshold: 7.5 ppm

Specific Gravity: 0.89 Viscosity: 200 - 800cp
Solubility in Water: disperses Vapor Pressure: 33mm hg

pH: N/A Evaporation Rate: 2.9 (Butyl Acetate=1)

Boiling Point: 82°C Boiling Range: N/A
Auto-ignition Temperature: 398.8°C Flash Point: 11.6°C

Flammability Limits (Approximate volume % in air): LEL: 2.0 UEL: 12

10. CHEMICAL STABILITY AND REACTIVITY INFORMATION

Reactivity: Polymerization will not occur.

Chemical Stability: Stable under normal conditions Hazardous Reactions: None, under normal processing Incompatibility: Strong acids and oxidizing materials

Hazardous Decomposition Products: Smoke, carbon oxides, aldehydes, asphyxiates and other products of incomplete combustion.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system. Breathing high concentrations of vapor may cause anesthetic effects. Excessive inhalation of this material causes. Not expected to pose respiratory irritation.

Eye Contact: Causes eye irritation. Exposure to vapor may cause tearing of the eyes, irritation and burning sensation.

Skin Contact: Prolonged or excessive skin contact with this product may cause mild skin irritation. A component in this product may be absorbed through the skin, especially if skin is damaged. Repeated exsposure may cause skin dryness or cracking.

Ingestion: May irritate mouth, throat, and stomach if swallowed. May cause central nervous system depression. Toxic if swallowed. May cause dizziness, headache, nausea, and vomiting. May cause drowsiness, faintness, weakness, collapse, and coma. Extreme overexposure may result in unconsciousness and possibly death.

Hazardous Component(s)

Immediate and Delayed Health Effects

2-propanol

Allergenj, Blood, Brain, Central Nervous System, Irritant,

Kidney, Liver, Spleen

Graphite

Lung

n-Butyl Alcohol

Allergen, Central Nervous System, Ear, Eyes, Irritant

1-Methoxy -2-propanol

Central Nervous System, Developmental, Irritant

OSHA Carcinogen

Hazardous Component (s)	NTP Carcinogen	IARC Carcinogen	(Specifically Regulated)
2-propanol	No	No	No
Graphite	No	No	No
n-Butyl Alcohol	No	No	No
1-Methoxy -2-propanol	No	No	No

12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains, surface water, ground water. Material expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Disposal Instructions: Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Isopropanol

Hazard class or division: 3

Identification number: UN 1219

Packing group: II

Water Transportation (IMO/IMDG

Proper shipping name: Isopropanol

Hazard class or division: 3

Identification number: UN 1219

Packing group: II

International Air (ICAO/IATA)

Proper shipping name: Isopropanol

Hazard class or division: 3

Identification number: UN 1219

15. REGULATORY INFORMATION

United States Regulatory Information:

OSHA Hazard Communication Standard: This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200

EPCRA Section 302: This material contains no extremely hazardous substances.

SARA 311/312 Reportable Hazard Categories: Immediate Health. Fire.

SARA (313) Toxic Release Inventory: This material contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). n-Butyl alcohol (CAS# 71-36-3).

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canadian Regulatory Information:

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

Revision Date:

July 1, 2015

Revision Reason:

Review

The information and recommendations contained herein are, to the best of \mathbb{Z} I knowledge and belief, accurate and reliable as of the date issued. \mathbb{Z} I does not warranty or guarantee their accuracy or reliability, and \mathbb{Z} I shall not be liable for any loss or damage arising out of the use thereof. The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. assumes no responsibility for injury from the use of the product described herein.