SECTION I - IDENTIFICATION

PRODUCT IDENTIFIER: Crystal Lube PRODUCT CODE: 9631, 9446, 9945, 8434 RECOMMENDED USE: Penetrating Lubricant RESTRICTIONS ON USE: None known. COMPANY NAME: Tifco Industries

COMPANY ADDRESS: P.O. Box 40277, Houston, TX 77240

COMPANY PHONE: 281-571-6000 **EMERGENCY PHONE:** 800-255-3924

SECTION II – HAZARDS IDENTIFICATION

CLASSIFICATION: Flammable Aerosol: Category 2

Gases Under Pressure: Compressed Gas

Eye Irritant: Category 2A Skin Sensitization: Category 1 Carcinogenicity: Category 2

Specific Target Organ Toxicity (Single Exposure): Category 3

Aspiration Hazard: Category 1

HAZARD STATEMENT(S): DANGER: Flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing cancer. May cause respiratory irritation, drowsiness or dizziness. May be fatal if swallowed and enters airways.

This product contains the following percentage of chemicals of unknown toxicity: N/A

PRECAUTIONARY STATEMENTS: Keep away from heat, sparks, open flames and hot surfaces. -No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Wash hands thoroughly after handling. Wear protective gloves, protective clothing and eye protection. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. Avoid breathing mist, vapors or spray. Contaminated clothing must not be allowed out of the workplace. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned: Get medical advice or attention. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting. Dispose of contents and container in accordance with local, state and federal regulations.

SYMBOL:









HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Acetone	67-64-1	10-20%
Methyl acetate	79-20-9	10-20%
Distillates (petroleum), hydrotreated light	64742-47-8	10-20%
Heptane	142-82-5	5-10%
4-Chlorobenzotrifluoride	98-56-6	5-10%
Carbon dioxide	124-38-9	1-5%

Safety Data Sheet Crystal Lube

SECTION IV - FIRST AID MEASURES

- **EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Seek medical attention if irritation persists.
- **INGESTION**: Rinse mouth out with water. Do not induce vomiting unless directed by medical authority. Keep head below hips if vomiting occurs. Seek immediate medical attention. Aspiration hazard. Never give anything by mouth to an unconscious person.
- **INHALATION**: Move to fresh air. If breathing is difficult, administer oxygen. If not breathing administer artificial respiration or at any sign of loss of consciousness seek immediate medical attention.
- **SKIN:** Wash thoroughly with soap and water for 15 minutes. Remove contaminated clothing and shoes immediately. Seek medical attention if irritation persists.
- **ACUTE HEALTH HAZARDS:** Prolonged contact with skin may cause irritation. May be harmful if absorbed through skin. Causes eye irritation including redness, tearing, and pain. Vapor or mist can cause eye irritation. Inhalation of mist or vapors may cause respiratory irritation, drowsiness or dizziness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
- CHRONIC HEALTH HAZARDS: May cause eye, respiratory and central nervous system (CNS) effects. May cause skin sensitization.
- **NOTE TO PHYSICIAN:** Treatment of overexposure should be directed at the control of symptoms and the clinical condition. If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. Contains petroleum distillate vomiting may cause aspiration pneumonia.

SECTION V - FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide or alcohol-resistant foam.

UNSUITABLE EXTINGUISHING MEDIA: Water jets or streams.

- **SPECIAL FIRE FIGHTING PROCEDURES:** Wear NIOSH approved Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires. Avoid breathing smoke, fumes, and decomposition products. Cool fire exposed containers with water fog to prevent bursting.
- UNUSUAL FIRE AND EXPLOSION HAZARDS: FLAMMABLE. Contents under pressure. Exposure to temperatures above 120 °F may cause bursting. Vapors heavier than air will settle in low lying areas and may travel to source of ignition and flash back. Vapors may form explosive mixtures with air. Keep away from heat, sparks, open flames and hot surfaces. No smoking. HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, various hydrocarbons.

SECTION VI – ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Refer to section VIII for proper Personal Protective Equipment.

- **SPILL:** Eliminate all sources of ignition. Absorb with non-combustible material like vermiculite, sand or earth. Place waste in proper containers for waste disposal. Prevent spill from entering sewers, storm drains and natural waterways.
- **WASTE DISPOSAL:** Dispose of in accordance with local, state and federal regulations. Do not dump in sewers. Wrap container and place in trash collection. Do not puncture, incinerate, or reuse container.
- RCRA STATUS: Waste likely considered D001 (Ignitable waste), under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION VII - HANDLING AND STORAGE

- **HANDLING AND STORAGE:** Wear proper personal protective equipment when using this product. Avoid contact with skin, eyes and clothing. Use only with adequate ventilation. Do not inhale mist or vapor. Do not use or store with strong oxidizers. Vapors may collect in low-lying areas. Protect from sunlight. Store in a well ventilated area. Do not expose to temperatures exceeding 50 °C/122 °F. Pressurized container: Do not pierce or burn, even after use. Wash hands thoroughly after handling.
- OTHER PRECAUTIONS: Keep out of the reach of children. Aspiration hazard if swallowed. Can enter lungs and cause damage. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not taste or swallow. Read and follow the directions on the product label. They are the best guide to using the product in the most effective manner. The label also gives you the necessary safety precautions to protect your health.
- **INCOMPATIBILITY:** Strong bases, strong oxidizing agents, light minerals, sulfur nitrate mixtures. Alkaline materials. Strong reducing agents.

Crystal Lube

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Acetone	1000 ppm	250 ppm
Methyl acetate	200 ppm	200 ppm
Distillates (petroleum), hydrotreated	Not Established	200 mg/m ³
light		
Heptane	500 ppm	400 ppm
4-Chlorobenzotrifluoride	Not Established	Not Established
Carbon dioxide	5000 ppm	5000 ppm

ENGINEERING CONTROLS / VENTILATION: Use only outdoors or in a well-ventilated area.

RESPIRATORY PROTECTION: Not required with normal use. Wear NIOSH/MSHA approved respiratory protection if exposure limits are exceeded.

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses/goggles, chemical resistant gloves and synthetic apron.

ADDITIONAL MEASURES: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective clothing to prevent repeated or prolonged contact with product. Avoid breathing spray. No smoking or open flames. Do not touch eyes when using this product. Wash hands thoroughly with soap and water after use.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Hazy, tan spray.

ODOR: Solvent.

ODOR THRESHOLD: N/D

pH: N/A

MELTING POINT/FREEZING POINT: N/D

INITIAL BOILING POINT AND BOILING RANGE: N/D

FLASH POINT: N/D

EVAPORATION RATE: > 3 Fast

FLAMMABILITY(solid/gas): Flammable Aerosol

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:

LOWER FLAMMABILITY LIMIT: N/D UPPER FLAMMABILITY LIMIT: N/D EXPLOSIVE LIMIT LOWER (%): N/D EXPLOISVE LIMIT UPPER (%): N/D VAPOR PRESSURE (mm Hg): N/D VAPOR DENSITY (AIR=1): N/D

RELATIVE DENSITY (H2O=1): 0.85 - 0.90 @ 77 °F (25 °C).

SOLUBILITY(IES): N/D

PARTITION COEFFICIENT: n-OCTANOL/WATER (Kow): N/D

AUTOIGNITION TEMPERATURE: N/D **DECOMPOSITION TEMPERATURE:** N/D

VISCOSITY: N/D

SECTION X – STABILITY AND REACTIVITY

REACTIVITY: None known. **CHEMICAL STABILITY:** Stable.

POSSIBLE HAZARDOUS REACTIONS: None known.

CONDITIONS TO AVOID: Temperatures greater than 122 °F and sources of ignition. Avoid incompatible materials.

INCOMPATIBLE MATERIALS: Strong bases, strong oxidizing agents, light minerals, sulfur nitrate mixtures. Alkaline materials.

Strong reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, fluorinated hydrocarbons and hydrogen fluoride.

Safety Data Sheet Crystal Lube

SECTION XI - TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Acetone (67-64-1): LD_{50} (Oral, Rat) 5800 mg/kg; LD_{50} (Oral, Mouse) 3000 mg/kg; LD_{50} (Oral, Rabbit) 5340 mg/kg; LC_{50} (Inhalation, Rat, 8h) 50100 mg/m³; LC_{50} (Inhalation, Mouse, 4h) 44,000 mg/m³. **Methyl acetate** (79-20-9): LD_{50} (Oral, Rat): >6482 mg/kg; LD_{50} (Dermal, Rat): >2000mg/kg; LC_{50} (Inhalation, Rat, 4h): >4902 mg/L. **Distillates** (petroleum), hydrotreated light (64742-47-8): LD_{50} (Oral, Rat) >6482 gg/kg; LC_{50} (Inhalation, Rat, 4h) >66482 mg/L. **Heptane** (142-82-5): LD_{50} (Oral, Rat) >6482 mg/kg; LD_{50} (Oral, Rat) >6482 mg/kg; LD_{50} (Oral, Rat) >6482 mg/kg; LD_{50} (Inhalation, Rat, 4h) >66482 mg/kg; LD_{50} (Oral, Rat) >6482 mg/kg; LD_{50} (Inhalation, Rat, 4h) >66482 mg/kg; LD_{50} (Oral, Rat) >6482 mg/kg; LD_{50} (Inhalation, Rat, 4h) >66482 mg/kg; LD_{50} (Inhalation, Rat, 4h) >66482 mg/kg; LD_{50} (Inhalation, Rat, 4hr) >66482 mg/kg; LD_{50} (Inhalation, Rat, 30m) >66482 mg/kg; LD_{50} (Inhalation, Rat, 4hr) >66482 mg/kg; LD_{50} (Inhalation, Rat, 30m) >66682 mg/kg; LD_{50} (Inhalation, R

ROUTES OF ENTRY: Eyes, Inhalation, Skin

EYES: Causes irritation, redness, tearing, pain, blurred vision. Vapors and fumes can cause eye irritation.

INGESTION: Not a likely route of exposure under normal product handling conditions. May cause gastrointestinal irritation, nausea, diarrhea, vomiting. Aspiration hazard. Can enter the lungs during swallowing or vomiting and cause chemical pneumonia or edema

INHALATION: May cause respiratory tract irritation, dizziness, headaches, nausea, unconsciousness, central nervous system (CNS) depression.

SKIN: May cause irritation, localized defatting. May be harmful if absorbed through the skin.

MEDICAL CONDITION AGGRAVATED: Pre-existing conditions of the central nervous system (CNS). May aggravate existing eye and respiratory conditions.

ACUTE HEALTH HAZARDS: Prolonged contact with skin may cause irritation. May be harmful if absorbed through skin. Causes eye irritation including redness, tearing, and pain. Vapor or mist can cause eye irritation. Inhalation of mist or vapors may cause respiratory irritation, drowsiness or dizziness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

CHRONIC HEALTH HAZARDS: May cause eye, respiratory and central nervous system (CNS) effects. May cause skin sensitization.

CARCINOGENICITY: OSHA: No ACGIH: No NTP: No IARC: 2B - Possible OTHER: CA Prop 65

SECTION XII - ECOLOGICAL INFORMATION

ECOTOXICITY: Harmful to aquatic life. **Acetone** (67-64-1): LC_{50} (*Oncorhynchus mykiss*, 96h) 5540 mg/L; EC_{50} (*Daphnia magna*, 48h) 6100 mg/L; EC_{50} (*Selenastrum quadricauda*, 8d) 7500 mg/L; EC_{50} (*Psuedomonas putida*, 16h) 1700 mg/L. **Distillates** (petroleum), hydrotreated light (64742-47-8): LC_{50} (Daphnia, 48h) > 1000 mg/L; EC_{50} (Algae, 72h) > 1000 mg/L. **n-Heptane** (142-82-5): EC_{50} (*Daphnia magna*, 48h) 1.50 mg/L. **Methyl acetate** (79-20-9): LC_{50} (*Pimepahles promelas*, 96h) 320 mg/L; LC_{50} (*Danio rerio*, 96h) 250 - 350 mg/L; EC_{50} (*Daphnia magna*, 48h) 1027 mg/L; EC_{50} (*Desmodesmus subspicatus*, 72h) > 120 mg/L; EC_{50} (*Psedomonas putida*, 16h) 6000 mg/L. **4-Chlorobenzotrifluoride** (98-56-6): LC_{50} (*Danio rerio*, 96h) 3 mg/L; EC_{50} (*Daphnia magna*, 48h) 2 mg/L; EC_{50} (*Pseudokirchneriella subcapitata*, 72h) > 0.41 mg/L.

PERSISTENCE AND DEGRADABILITY: This product is biodegradable.

BIOACCUMULATIVE POTENTIAL: Components in this mixture can bioaccumulate in aquatic organisms.

MOBILITY IN SOIL: This product is mobile in soil. **OTHER ADVERSE EFFECTS:** None known.

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with local, state and federal regulations. Do not dump in sewers. Wrap container and place in trash collection. Do not puncture, incinerate, or reuse container.

RCRA STATUS: Waste likely considered D001 (Ignitable waste), under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION XIV - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Aerosols, Ltd. Qty.

HAZARD CLASS/DIVISION: 2.1 UN/NA NUMBER: UN1950 PACKING GROUP: N/A

AIR SHIPMENT

PROPER SHIPPING NAME: Aerosols, flammable.

HAZARD CLASS/DIVISION: 2.1

Safety Data Sheet Crystal Lube

UN/NA NUMBER: UN1950 PACKING GROUP: N/A

SHIPPING BY WATER: VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Aerosols.
HAZARD CLASS/DIVISION: 2.1
UN/NA NUMBER: UN1950
PACKING GROUP: N/A

ENVIRONMENTAL HAZARDS WATER: Marine Pollutant.

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All chemicals are listed or exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Acetone (67-64-1) Reportable Quantity = 5,000 pounds.

SARA 311/312 HAZARD CATEGORIES: Flammable (gases, aerosols, liquids, solids). Gas under pressure. Serious eye damage or eye irritation. Respiratory or skin sensitization. Carcinogenicity. Specific target organ toxicity (single or repeated exposure). Aspiration hazard.

SARA 313 REPORTABLE INGREDIENTS: This product does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

CLEAN WATER ACT: Acetone (67-64-1) is a hazardous substance.

STATE REGULATIONS: California Proposition 65: WARNING: This product can expose you to chemicals including para-Chlorobenzo trifluoride, PCBTF, which is known to the state of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Acetone (67-64-1): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states: CA, DE, ID, ME, MA, MN, NJ, PA, RI, WA. Methyl acetate (79-20-9): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Pollutants lists for the following states: MA, PA, RI. Heptane (142-82-5): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states: CA, IL, MA, NJ, PA, RI.

INTERNATIONAL REGULATIONS: No information available.

VOLATILE ORGANIC COMPOUNDS (VOC): 9.7%

NFPA HEALTH: 2
NFPA FLAMMABILITY: 2
NFPA REACTIVITY: 0
NFPA OTHER: None
HMIS PROTECTION: C

SECTION XVI - OTHER INFORMATION

PREPARATION BY: Roberto Cerón **DATE PREPARED:** 01/24/2023

REVISION DATE: N/A

N/A = Not Applicable; N/D = Not Determined

DISCLAIMER: To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.