

SAFETY DATA SHEET



KROHN INDUSTRIES
Quality & Service Since 1955

This Safety Data Sheet (SDS) complies with the requirements of the U.S. Federal Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200, as updated in 2012) and equivalent state Standards. It has also been developed in accordance with the United Nations Globally Harmonized System of Classification of Chemicals (GHS), and the Canadian Workplace Hazardous Materials Information System (WHMIS). Refer to Section 16 of this document for the definition of terms and abbreviations.

SECTION 1: IDENTIFICATION of the Substance/Mixture and of the Company/Undertaking

1.1 PRODUCT IDENTIFIER:

- PRODUCT NAME: **FLUX SOLUTION for the FLUXED FLAME TORCH SYSTEM**
- VOLUMES: 1 quart
- CHEMICAL NAME/CLASS: Solvent Mixture.

1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE OR USES ADVISED AGAINST

- IDENTIFIED USE: Flux Solution for the Krohn Fluxed Flame Torches Systems
- USES ADVISED AGAINST: None Specified

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

- MANUFACTURER/
SUPPLIER: **KROHN INDUSTRIES, INC.**
- ADDRESS: 303 Veterans Blvd.; Carlstadt, NJ; 07072
- BUSINESS PHONE: 201-933-9696
- EMERGENCY PHONE: 1-800-255-3924(CHEMTEL; 24 hours)

1.4 OTHER PERTINENT INFORMATION

- This product is used as part of metal finishing and polishing processes in relatively small volumes (1 quart). This SDS has been developed to address safety concerns affecting small volume handling situations and those involving warehouses and other workplaces where large numbers of these items are stored or distributed.

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

REGULATION	CLASSIFICATION
US OSHA HCS CANADA WHMIS	Flammable liquids (Category 2), Acute toxicity - Oral (Category 3), Acute toxicity, Inhalation - Category 3); Acute toxicity - Dermal (Category 3); Eye irritation (Category 2A); Reproductive Toxicity (Category 2); Specific target organ toxicity - single exposure (Category 1; Optic Nerve); Specific target organ toxicity - single exposure (Category 3, CNS)

2.2 LABEL ELEMENTS:

- BASED ON GLOBALLY HARMONIZED SYSTEM

Symbol: To the right.



Signal Word: DANGER.

Hazard statement(s):

- H225 Highly flammable liquid and vapor.
- H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.
- H370 Causes damage to organs (optic nerve).
- H319: Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

- Suspected of damaging fertility or the unborn child.

SECTION 2: HAZARDS IDENTIFICATION (Continued)

Precautionary statement(s):

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe vapor, mists, or sprays.
- 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 protective gloves/ eye protection/ face protection.
- P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor.
- P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
- P362 Take off contaminated clothing and wash before reuse.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P235 Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 OTHER PERTINENT DATA ON CHEMICAL AND PHYSICAL HAZARDS:

- **HAZARDOUS MATERIALS IDENTIFICATION SYSTEM**

Health	2*	HMIS Personal Protective Equipment Rating: Occupational Use situations: B/C; Safety glasses and gloves/ body protection suitable to specific circumstances of use should be considered. *Central Nervous System Effects; Reproductive Toxicity; Specific Target Organ Toxicity/Single and Repeated Exposure
Flammability	3	
Physical Hazard	0	
Protective Equipment	B/C	

- **CANADIAN REGULATORY STATUS**

- WHMIS 2015: See Previous Section.
- This SDS contains all the information required by the Hazardous Products Regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 SUBSTANCES/MIXTURES

CHEMICAL	CAS NUMBER	GHS HAZARD CLASSIFICATION FOR CHEMICAL	% (w/w)
Methanol	67-56-1	Flammable liquids (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; Optic Nerve)	85-95
Acetone	67-64-1	Flammable liquids (Category 2), Eye irritation (Category 2A), Specific target organ toxicity - single exposure (Category 3, Central nervous system)	15-25
Boric Acid	10043-35-3	Reproductive toxicity (Category 2)	Balance

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

AREA EXPOSED

Eye Contact

Flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Check for and remove contact lenses. Seek medical attention if irritation persists.

Skin Contact

Flush area with warm, running water for several minutes. Seek medical attention if irritation persists.

Inhalation

Obtain fresh air. See medical attention if symptoms persist or develop after exposure ends.

Ingestion

If conscious only: Rinse mouth with water. Do not induce vomiting. Contact a Poison Control Center or physician for instructions.

4.2 MOST IMPORTANT ACUTE AND CHRONIC EXPOSURE SYMPTOMS

- **ACUTE HEALTH EFFECTS:**

AREA EXPOSED

Eye Contact

May cause mild to serious eye irritation, depending on duration of contact.

Skin Contact

May cause mild skin irritation, depending on duration of contact.

Inhalation

May cause mild respiratory tract irritation; symptoms may include coughing and sneezing depending on volume of mist/spray inhaled. Inhalation of vapors can cause central nervous system effects (i.e., drowsiness, dizziness). Inhalation of vapors, especially in high concentrations for prolonged periods, may also cause adverse effects on the optic nerve.

Ingestion

May cause gastrointestinal system irritation; symptoms may include pain, diarrhea, nausea and vomiting if large volumes are ingested. Ingestion of the product may also cause central nervous system effects. Ingestion may also cause adverse effects on optic nerves.

- **CHRONIC HEALTH EFFECTS:** Prolonged or repeated skin contact may cause dermatitis.

- **TARGET ORGANS:** Skin, eyes, reproductive system, central nervous system, optic nerve.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

- **RECOMMENDATIONS TO PHYSICIANS:** Treat symptoms and eliminate exposure.

- **MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** Medical conditions impacting the target organs can be adversely impacted by overexposure to this product.

SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

- **RECOMMENDED FIRE EXTINGUISHING MEDIA:** Dry Powder, Foam, Carbon Dioxide, or any other suited to flammable liquids.
- **UNSUITABLE FIRE EXTINGUISHING MEDIA:** None known.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- **NFPA FLAMMABILITY CLASSIFICATION:** Class IC Flammable Liquid.
- **UNUSUAL HAZARDS IN FIRE SITUATIONS:** When involved in a fire, this material may produce irritating vapors and toxic gases (e.g., carbon monoxide, carbon dioxide, and boron compounds).
 - Sensitivity to Mechanical Impact: Not sensitive.
 - Explosion Sensitivity to Static Discharge: Static electrical sparks can ignite vapors.



5.3 ADVICE FOR FIREFIGHTERS

- Wear Self Contained Breathing Apparatus and full protective equipment for fire response. Move containers from fire area if it can be done without risk to personnel. Otherwise, use water spray to keep fire-exposed containers cool. Contaminated equipment should be rinsed thoroughly with water before returning to service.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

- **RESPONSE TO INCIDENTAL RELEASES:** Personnel who have received basic chemical safety training can generally handle small-scale releases (e.g., under 1 quart). For small releases, the minimum Personal Protective Equipment should be rubber gloves and rubber apron, splash goggles or safety glasses. Use caution during clean-up; avoid stepping into spilled liquid, as contaminated surfaces can be very slippery.
- **RESPONSE TO NON-INCIDENTAL RELEASES:** Generally, releases of this product will be no larger than the loss of one shipment of material (therefore, 1 quart or less). Subsequently, personnel can follow the instructions for incidental releases. As needed, respond to non-incident chemical releases of this product (such as the simultaneous destruction of several pallets of this product) by clearing the impacted area and contacting appropriate emergency personnel.
 - **ADDITIONAL PRECAUTIONS:** Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Ensure adequate fire protection.
 - **RESPIRATORY PROTECTION:** For non-incident releases of this product, minimum Personal Protective Equipment should be Level C: triple-gloves, chemical resistant apron, boots, and splash goggles and air purifying respirator equipped with an organic vapor. Level B protection should be used when oxygen levels are below 19.5% or are unknown, or if there are high concentrations of vapors in the environment.
- **RESPONSE PROCEDURES FOR ANY RELEASE:** Absorb spilled liquid with polypads or other suitable absorbent materials. Rinse equipment/area thoroughly with detergent/water solution, if necessary.

6.2 ENVIRONMENTAL PRECAUTIONS

- Avoid response actions that can cause a release of a significant amount of the substance (into the environment).

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

- **SPILL RESPONSE EQUIPMENT:** Broom/dustpan or Polypad/sponge.

6.4 REFERENCES TO OTHER SECTIONS

- **SECTION 8:** For exposure levels and detailed personal protective equipment recommendations.
- **SECTION 13:** For waste handling guidelines.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

- **HYGIENE PRACTICES:** Keep out of reach of children. Follow good chemical hygiene practices. Do not smoke, drink, eat, or apply cosmetics in the chemical use area. Avoid inhalation of vapors, mists, sprays. Use in well-ventilated area. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up spilled product immediately.
- **HANDLING RECOMMENDATIONS:** Employees must be appropriately trained to use this product safely as needed. Keep containers closed when not in use. Open containers slowly on a stable surface. Use non-sparking tools. Bond and ground containers during transfers of material. If this product is transferred into another container, only use portable containers and dispensing equipment approved for flammable liquids. Never perform any welding, cutting, soldering, drilling, or other hot work on an empty container or piping until all liquid, vapors, and residue have been cleared.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

- **STORAGE RECOMMENDATIONS:** Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Have appropriate extinguishing equipment in the storage area (e.g., sprinkler system, portable fire extinguishers). Ensure all containers are correctly labeled. Store containers away from direct sunlight, sources of intense heat, or where freezing is possible. Store this product away from incompatible chemicals (See Section 10, Stability and Reactivity). Empty containers may contain residual material; therefore, empty containers should be handled with care. Material should be stored in secondary containers, or in a diked area, as appropriate. Storage and use areas should be covered with

impervious materials. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged.

SECTION 7: HANDLING AND STORAGE

7.3 SPECIFIC END USES

- **RECOMMENDATIONS:** Place product away from children and animals.
- **INDUSTRIAL-SECTOR SPECIFIC SOLUTIONS: PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT --** Follow practices indicated in Section 6 (Accidental Release Measures)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:**

COMPONENT	ACGIH TLV	OSHA PEL	NIOSH REL	OTHER
Methanol	TWA = 200 ppm; STEL = 250 ppm; Skin	TWA= 200 ppm	TWA = 200 ppm; STEL = 250 ppm; Skin	IDLH: 6000 ppm CAL-TWA = 200 ppm; CAL-STEL = 250 ppm; Skin
Acetone	TWA = 250 ppm; STEL = 500 ppm	TWA = 1000 ppm	TWA = 250 ppm	IDLH: 2500 ppm CAL-TWA = 200 ppm; CAL-STEL = 500 ppm
Boric Acid	2mg/m ³ TWA; 6 mg/m ³ STEL (Inhalable Fraction of Aerosol)	NE	NE	NE.

- **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** The following BEIs have been established for the following components of this product:
 - **Methanol:** Methanol in urine (end of shift) = 15 mg/L
 - **Acetone:** Acetone in urine (end of shift) = 25 mg/L

8.2 EXPOSURE CONTROLS

- **ENGINEERING CONTROLS:** Use this product in well-ventilated environment. Safety showers, eye wash stations, and hand-washing equipment should be available.
- **RESPIRATORY PROTECTION:** None needed under normal conditions of use. Use NIOSH approved respirators if ventilation is inadequate to control mists or sprays. For situations in which significant amounts of splashes, sprays, or mists could be generated, wear an air-purifying respirator with an organic vapor filter.
- **HAND PROTECTION:** Nitrile or neoprene gloves should be used. If necessary, refer to U.S. OSHA 29 CFR 1910.138, or the appropriate standards of Canada.
- **EYE PROTECTION:** Splash goggles or safety glasses. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, or the appropriate standards of Canada.
- **BODY PROTECTION:** Use a body protection appropriate to task (e.g., lab coat, coveralls, or apron). Care should be taken to select protection for potentially exposed areas when prolonged exposure could occur in occupational settings.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- (a) **APPEARANCE:** Clear colorless liquid.
- (b) **ODOR:** Strong alcohol odor.
- (c) **ODOR THRESHOLD:** 8.9 ppm (Methanol).
- (d) **pH:** Not applicable.
- (e) **MELTING POINT/FREEZING POINT:** Approximately -98 °C (-144 °F)

(f) INITIAL BOILING POINT AND BOILING RANGE: Approximately 64.7 °C (148.5 °F)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (Continued)

- (g) FLASH POINT: Approximately 9.7 °C (49.5 °F)
- (h) EVAPORATION RATE (nBuAc=1): < 1
- (i) FLAMMABILITY: Class IB Flammable Liquid.
- (j) UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: 6%/36% (Estimated)
- (k) VAPOR PRESSURE (mmHg @ 20°C): Approximately 130.3 hPa.
- (l) VAPOR DENSITY (AIR = 1): 1,1 (Estimated)
- (m) RELATIVE DENSITY (water=1): 0.8 (Estimated)
- (n) SOLUBILITY: Miscible in water.
- (o) PARTITION COEFFICIENT: N-OCTANOL/WATER: Approximately -0.77.,
- (p) AUTO-IGNITION TEMPERATURE: Approximately 455.0 °C (851.0 °F).
- (q) DECOMPOSITION TEMPERATURE: Not determined.
- (r) VISCOSITY: Not determined.
- (s) EXPLOSIVE PROPERTIES: Not applicable.
- (t) OXIDIZING PROPERTIES: Not an oxidizer.

9.2 OTHER INFORMATION

- VOC (less water & exempt): Not applicable.

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

- Not reactive under typical conditions of use or handling.

10.2 CHEMICAL STABILITY

- Normally stable under standard temperatures and pressures.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

- This product is not self-reactive or air-reactive; it will not undergo hazardous polymerization.

10.4 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals.

10.5 INCOMPATIBLE MATERIALS

- This product is not compatible with strong oxidizing agents, strong acids, or strong bases.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition include carbon monoxide, carbon dioxide, and boron compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

- ACUTE TOXICITY:
 - PRODUCT ESTIMATED TOXICITY:
 - Acute Toxicity Estimate (Oral): Between 50 and 300 mg/kg
 - Acute Toxicity Estimate (Dermal): Between 200 and 1000 mg/kg
 - Acute Toxicity Estimate (Inhalation): Between 2 and 10 mg/L (Vapors)
 - COMPONENT TOXICOLOGY DATA: The following data are available for hazardous components in this product greater than 1% in concentration
 - METHANOL**
LD50 (Oral, Rat) = 1,187 - 2,769 mg/kg
LC50 (Inhalation, Rat) = 4 hours - 128.2 mg/l
LD50 (Dermal, Rabbit) = 17,100 mg/kg
 - BORIC ACID**
LD50 (oral, rat) = 3500 – 4100 mg/kg
LD50 (dermal, rat) = 2000 mg/kg
LC5-(inhalation, rat) = >2.03 mg/L Rat/4 ours
 - ACETONE**
LD50 (Oral, Rat) = 5800 mg/kg
LC50 (Inhalation, Rat) = 4 hours/- 50,100 mg/m³;
LD50 (Dermal, Guinea Pig) = 7426 mg/kg
LDLo (Human, Unreported) = 1159 mg/kg
TDLo (oral, man) = 2857 mg/kg

SECTION 11: TOXICOLOGICAL INFORMATION

- **DEGREE OF IRRITATION:** Mild to serious eye or irritation, depending on duration of exposure. It may cause mild skin irritation.
 - **SENSITIZATION:** Not reported to have skin or respiratory sensitization effects.
 - **REVIEW OF ACUTE SYMPTOMS AND EFFECTS:** See Section 2 (Hazards Information) and Section 4 (First-Aid Measures) for further details.
 - **EYES:** Can cause mild to serious eye irritation, depending on duration of contact.
 - **SKIN:** May cause mild irritation upon prolonged exposure.
 - **INHALATION:** Mists and vapors of this product may cause mild nasal irritation, and may cause central nervous system effects.
 - **INGESTION:** Although not anticipated to be a significant route of occupational over-exposures, ingestion of this product may cause gastrointestinal problems and central nervous system effects.
 - **CHRONIC TOXICITY:**
 - **CARCINOGENICITY STATUS:** The following table summarizes the carcinogenicity listing for the components of this product. "NO" indicates that the substance is not considered to be, or suspected to be, a carcinogen by the listed agency.
- | CHEMICAL | IARC | NTP | NIOSH | OSHA | OTHER |
|------------|------|-----|-------|------|---|
| Methanol | NO | NO | NO | NO | NO |
| Acetone | NO | NO | NO | NO | TLV-4: Not Classifiable as a Human Carcinogen; EPA – I: Inadequate Data |
| Boric Acid | NO | NO | NO | NO | NO |
- **REPRODUCTIVE TOXICITY INFORMATION:** Components of this product are reported to cause reproductive effects under typical circumstances of exposure associated with use of the product as directed. The following data are available, in terms of reproductive toxicity effects:
 - **Methanol:** Animal testing has demonstrated a wide range of adverse development effects.
 - **MUTAGENIC EFFECTS:** The components of this product are not reported to cause reproductive effects under typical circumstances of exposure at the concentrations present in this product.
 - **SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE:** The following organs can be impacted after single exposures to this product: central nervous system and optic nerve.
 - **SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE:** None reported.
- **OTHER INFORMATION**
 - **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
 - **ADDITIONAL TOXICOLOGY:** None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY

- Based on available data, this product may be harmful to contaminated terrestrial plants or animals.
- The following aquatic toxicity data are available for components of this product:

ACETONE

LC50 (Oncorhynchus mykiss): 5,540 mg/L - 96 hours
LC50 (Daphnia magna): 8,800 mg/L - 48 hours

h

METHANOL

EC50 (Daphnia magna): > 10,000.00 mg/l - 48 h
NOEC (Oryzias latipes): 7,900 mg/l - 200 h
LC50 (Lepomis macrochirus): mortality - 15,400.0 mg/l - 96 h

SECTION 12: ECOLOGICAL INFORMATION (Continued)

12.2 PERSISTENCE AND DEGRADABILITY

- When released into the soil, the components of this product are expected to biodegrade, dissipate in soils via oxidation, or otherwise chemically degrade or photo-decompose via solar radiation.

12.3 BIOACCUMULATIVE POTENTIAL

- The components of this product are not anticipated to bioaccumulate in any significant quantities.

12.4 MOBILITY IN SOIL

- It is to be expected this product will have small mobility in soil. Some of the components may get into the soil and, ultimately, the ground water.

SECTION 13: DISPOSAL CONSIDERATION

13.1 WASTE TREATMENT METHODS

- WASTE HANDLING RECOMMENDATIONS:** Prepare, transport, treat, store, and dispose of waste product according to all applicable local, U.S. State and U.S. Federal regulations, or the applicable Canadian standards.


13.2 DISPOSAL CONSIDERATIONS

- EPA RCRA WASTE CODE:** D001, for wastes consisting only of this product.

SECTION 14: TRANSPORT INFORMATION

14.1 TRANSPORTATION REGULATIONS

- DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS SHIPPING REGULATIONS:**

UN/NA Number	Proper Shipping Name	Packing Group	Hazard Class	Label	North American Emergency Response Guide #	Marine Pollutant Status
UN1993	Flammable liquids, n.o.s. (Methanol)	II	3		128	Not applicable.

- CANADIAN TRANSPORTATION INFORMATION:** This product is regulated by Transport Canada as dangerous goods under Canadian transportation standards. Refer to above information.
- IATA DESIGNATION:** Regulated as dangerous goods by the International Air Transport Association.
- IMO DESIGNATION:** Regulated as dangerous goods by the International Maritime Organization.

14.2 ENVIRONMENTAL HAZARDS

- None described, as related to transportation.

14.3 SPECIAL PRECAUTIONS FOR USERS

- Not applicable.

14.4 TRANSPORT IN BULK

- Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS SPECIFIC FOR PRODUCT

• OTHER IMPORTANT U.S. REGULATIONS

- **U.S. SARA THRESHOLD PLANNING QUANTITY:** Flammable Liquids, Acute Toxicity; Eye Damage/Irritation; Reproductive Toxicity; Specific Target Organ Toxicity - Single Exposure/Repeated Exposure.
- **U.S. SARA HAZARD CATEGORIES (SECTION 311/312, 40 CFR 370-21):** ACUTE: Yes; CHRONIC: No; FIRE: Yes; REACTIVE: No; SUDDEN RELEASE: No
- **U.S. CERCLA REPORTABLE QUANTITY (RQ):** Acetone = 5000 lb.; Methanol = 5000 lb.
- **U.S. SARA 313:** Methanol.
- **U.S. TSCA INVENTORY STATUS:** All components of this product are listed on the TSCA Inventory.
- **CALIFORNIA SAFE DRINKING WATER ACT (PROPOSITION 65) STATUS:**



WARNING: This product can expose you to Methanol, a chemical known to the state of California to cause birth defects or reproductive harm. For more information, go to www.p65Warnings.ca.gov

• INTERNATIONAL REGULATIONS

- **CANADIAN DSL/NDSL INVENTORY STATUS:** The listed components of this product are on the DSL/NDSL Inventory.
- **CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITY SUBSTANCES LISTS:** The components of this product are not on the CEPA Priority Substances Lists.

15.2 CHEMICAL SAFETY ASSESSMENT.

- No information available.

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGE.

- **ORIGINAL DATE OF ISSUE:** May 13, 2019
- **SUPERCEDES:** Not applicable.
- **CHANGE INDICATED:** Not applicable.

16.2 KEY LITERATURE REFERENCES AND SOURCES FOR DATA

- SAFETY DATA SHEETS FOR COMPONENT PRODUCTS.
- Federal OSHA Hazard Communication Standard: 29 CFR 1910.1200
- RTECS – Registry of Effects of Toxic Chemicals

16.3 CLASSIFICATION AND PROCEDURE USED TO DERIVE THE CLASSIFICATIONS FOR MIXTURES

- **CLASSIFICATION:** Section 2 (Hazards Information) provides all relevant classification information used for this product. The assignments were based on data available for the component products, calculations, expert judgment, and weight of evidence.

16.4 WARRANTY AND COPYRIGHT

- **WARRANTY:** The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Krohn Industries assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Krohn Industries assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.
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SECTION 16: OTHER INFORMATION (Continued)

16.5 ABBREVIATIONS AND ACRONYMS.

ALL SECTIONS: OSHA: U.S. Federal Occupational Safety and Health Administration. WHMIS: Canadian Workplace Hazardous Materials Standard. GHS: Globally Harmonized System of Classification of Chemical Substances

SECTION 2: HAZARDOUS MATERIALS IDENTIFICATION SYSTEM RATING: This is a rating system used by industry to summarize physical and health hazards to chemical users and was originally developed by the National Paint and Coating Association. 0 = No Significant Hazard. 1 = Slight Hazard. 2 = Moderate Hazard. 3 = Severe Hazard. 4 = Extreme Hazard.

SECTION 3: CAS Number: Chemical Abstract Service Number, which is used by the American chemical Society to uniquely identify a chemical.

SECTION 5: NFPA: National Fire Protection Association. NFPA FLAMMABILITY CLASSIFICATION: The NFPA uses the flash point (F.I.P.) and boiling point (BP) to classify flammable or combustible liquids. Class IA: F.I.P. below 73°F and BP below 100°F. Class IB: F.I.P. below 73°F and BP at or above 100°F. Class IC: F.I.P. at or above 73°F and BP at or above 100°F. Class II: F.I.P. at or above 100°F and below 140°F. Class IIIA: F.I.P. at or above 140°F and below 200°F. Class IIIB: F.I.P. at or above 200°F. NFPA HAZARDOUS MATERIALS RATING: This is a rating system used to summarize physical and health hazards to firefighters. 0 = No Significant Hazard. 1 = Slight Hazard. 2 = Moderate Hazard. 3 = Severe Hazard. 4 = Extreme Hazard.

SECTION 8: NE: Not established. ACGIH: American Conference of Government Industrial Hygienists; TWA: Time-Weighted Average (over an 8-hour work day); STEL: Short-Term Exposure Limit (15-minute average, no more than 4-times daily and each exposure separated by one-hour minimally); C: Ceiling Limit (concentration not to be exceeded in a work environment). PEL: Permissible Exposure Limit. NIOSH: National Institute of Occupational Safety and Health; REL: Recommended Exposure Limit; IDLH: Immediately Dangerous to Life and Health Concentrations. *Note*: In July 1992, a court ruling vacated the more protective PELs set by OSHA in 1989. Because OSHA may enforce the more protective levels under the "general duty clause", both the current and vacated levels are presented in this document. ppm: Parts per Million. mg/m³: Milligrams per cubic meter. mppcf: Millions of Particles per Cubic Foot. BEI: Biological Exposure Limit. CA: California Permissible Exposure Limits for Chemical Contaminants.

SECTION 9: pH: Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, pH of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. FLASH POINT: Temperature at which a liquid generates enough flammable vapors so that ignition may occur. AUTOIGNITION TEMPERATURE: Temperature at which spontaneous ignition occurs. LOWER EXPLOSIVE LIMIT (LEL): The minimal concentration of flammable vapors in air which will sustain ignition. UPPER EXPLOSIVE LIMIT (UEL): The maximum concentration of flammable vapors in air which will sustain ignition. ≈: Approximately symbol.

SECTION 11: CARCINOGENICITY STATUS: NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. REPRODUCTIVE TOXICITY INFORMATION: Mutagen: Substance capable of causing chromosomal damage to cells. Embryotoxin: Substance capable of damaging the developing embryo in an overexposed female. Teratogen: Substance capable of damaging the developing fetus in an overexposed female. Reproductive toxin: Substance capable of adversely affecting male or female reproductive organs or functions. TOXICOLOGY DATA: LD_{xx} or LC_{xx}: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designate route of administration. This value is used to assess the toxicity of chemical substances to humans. TD_{xx} or TC_{xx}: The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (xx) of exposed test animals by the designate route of administration.

SECTION 12: TLm – Median Tolerance Limit

SECTION 13: RCRA: Resource Conservation and Recovery Act. The regulations promulgated under this Act are found in 40 CFR, Sections 260 ff, and define the requirements of hazardous waste generation, transport, treatment, storage, and disposal. EPA RCRA Waste Codes: Defined in 40 CFR Section 261.

SECTION 15: CERCLA: Comprehensive Environmental Response Compensation and Liability Act (a.k.a. "Superfund") and SARA: (Superfund Amendment and Reauthorization Act). The regulations promulgated under this Act are located under 40 CFR 300 ff. and provide "community right-to-know" requirements. DSL/NDSL: Canadian Domestic Substances and Non-Domestic Substances Lists.