8/23/2022

KROIL PENETRANT - AEROKROIL

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name for US: KROIL PENETRANT – AEROKROIL WITH SPRAYTECH™
Product Name for Canada: AEROKROIL

Product Use: Penetrant/Lubricant for Industrial Use
Manufacturer: Kano Laboratories LLC, 1000 E. Thompson Lane Nashville, TN 37211
Emergency Phone Number: Chemtrec 1 (800) 424-9300
Manufacturer Phone Number: 615-833-4101
Website: www.kroil.com
SDS Date of Preparation: August 23, 2022

SECTION 2: HAZARDS IDENTIFICATION

GHS / HAZCOM 2012 Classification:

HEALTH	PHYSICAL
Skin Irritation Category 2 Eye Irritation Category 2A Aspiration Hazard Category 1 Skin Sensitization Category 1	Flammable Aerosol Category 2 Gas Under Pressure: Compressed Gas

Label Elements

DANGER!



Flammable aerosol.
Contains gas under pressure; may explode if heated. Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May be fatal if swallowed and enters airways.
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.
Wash thoroughly after handling. Avoid breathing mist or vapors.
Contaminated clothing must not be allowed out of the workplace.
Wear protective gloves and eye protection.
IF SWALLOWED: Immediately call a POISON CENTER. Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
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 attention.
Protect from sunlight.
Do not expose to temperatures exceeding 50°C/122°F.
Store locked up. Store in a well-ventilated place.
Dispose of contents and container in accordance with local and national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS#	%
Severely Hydrotreated Petroleum Distillates	64742-52-5	30-50
LVP Aliphatic Hydrocarbon	64742-47-8	20-40
Terpene Alcohol*	Proprietary	7-13
Diisobutyl Ketone (2,6-dimethylheptan-4-one; 4-heptanone, 2,6-dimethyl)	108-83-8	7-13
Compressed Air Propellant	132259-10-0	5
Diacetone Alcohol (2-hydroxy-2-methyl-4-pentanone; 4-hydroxy-4-methylpentan-2-one)	123-42-2	1 – <3
Isobutyl Alcohol (1-propanol, 2-methyl-; isobutanol)	78-83-1	1 – <3

The exact percentage has been withheld as a trade secret or is a variation in formula.
***HMIRA claim filed 2022-07-26; RN: 03479770**

SECTION 4: FIRST AID MEASURES

EYE: Rinse thoroughly with water for at least 15 minutes, while holding the eye lids open to be sure the material is washed out. Get medical attention if irritation develops or persists.

SKIN: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or rash occurs. Launder clothing before re-use.

INHALATION: Remove victim to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention if symptoms develop.

INGESTION: Ingestion is an unlikely route of exposure for aerosol products. If ingestion of the concentrate occurs, do NOT induce vomiting. Keep the victim calm and warm. Never give anything by mouth to an unconscious or drowsy person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Get immediate medical attention.

MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE AND DELAYED: May cause eye and skin irritation. May cause an allergic skin reaction. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, nausea and vomiting. Harmful or fatal if swallowed. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED: If swallowed, get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA: Use carbon dioxide, dry chemical or foam. Water may be ineffective but can be used to cool containers and structures.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Flammable aerosol. Contents under pressure. Keep away from heat and open flames. Container may rupture or explode in the heat of a fire. Prolonged exposure to temperatures above 120ºF may cause cans to burst. Never use welding or cutting torch on or near containers (even empty) because product can ignite explosively. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion products may be hazardous: Oxides of carbon, organic compounds, smoke and fumes.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Use shielding to protect against bursting containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES: Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Ventilate the area with explosion-proof equipment.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. Report spills and releases as required to appropriate authorities.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Place leaking can in an open pail or pan in a well-ventilated area until the pressure has been released. Cover liquid with an inert absorbent material and collect into an appropriate container for disposal.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash exposed skin thoroughly with soap and water after use. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Do not cut, braze, solder, grind or weld on or near containers. Contents under pressure. Do not puncture, crush or incinerate containers, even when empty. Keep out of the reach of children.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store in a cool, well-ventilated area at temperatures below 120°F. Do not store in direct sunlight. Store as a Level 3 aerosol.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME	EXPOSURE LIMITS
Severely Hydrotreated Petroleum Distillates (as mineral oil)	5 mg/m^3 TWA OSHA PEL (as oil mist) 5 mg/m^3 TWA ACGIH TLV (inhalable fraction)
LVP Aliphatic Hydrocarbon	100 ppm TWA Manufacturer Recommended
Terpene Alcohol	None Established
Diisobutyl Ketone	50 ppm TWA OSHA PEL 25 ppm TWA ACGIH TLV
Compressed Air Propellant	
Diacetone Alcohol	50 ppm OSHA TWA PEL- 50 ppm TWA ACGIH TLV
Isobutyl Alcohol	100 ppm TWA OSHA PEL 50 ppm TWA ACGIH TLV

APPROPRIATE ENGINEERING CONTROLS: Use with adequate general or local exhaust ventilation to maintain concentrations below the occupational exposure limits. Use explosion proof electrical equipment and wiring where required.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION: If the exposure limits listed above are exceeded, a NIOSH approved respirator with organic vapor cartridges may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

HAND PROTECTION: Impervious gloves are recommended when needed to avoid skin contact.

EYE PROTECTION: Chemical safety goggles recommended.

SKIN PROTECTION: Impervious clothing as required to prevent skin contact and contamination of personal clothing.

HYGIENE MEASURES: Suitable eye wash and washing facilities should be available in the work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Slightly reddish liquid packaged as an aerosol	**Odor:**	Solvent
Odor Threshold:	Not available	**pH:**	Not available
Melting/Freezing Point:	Not available	**Boiling Point/Range:**	Not available
Flash Point:	132°F (55.5°C) TOC	**Evaporation Rate:**	Not available
Flammability (Solid, Gas):	Not applicable	**Flammability Limits:**	UEL: 10.9% (aliphatic alcohol #2) LEL: 0.6% (LVP Aliphatic Hydrocarbon)
Vapor Pressure:	Not available	**Vapor Density:**	Not available
Relative Density:	0.8596	**Solubilities:**	Negligible in Water
Partition Coefficient: (N-Octanol/Water)	Not available	**Auto Ignition:**	Not available
Decomposition Temperature:	Not available	**Viscosity:**	Not available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: None known.

CHEMICAL STABILITY: Stable under normal conditions of storage or use.

POSSIBILITY OF HAZARDOUS REACTIONS: None known.

CONDITIONS TO AVOID: Avoid heat, sparks, flames and all other sources of ignition. Do not puncture or incinerate containers.

INCOMPATIBLE MATERIALS: Avoid strong oxidizing agents, reducing agents, acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion will produce oxides of carbon, acetone, acrid fumes and smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS:

EYE: May cause eye irritation with redness, tearing and stinging.

SKIN: May cause irritation with redness, rash, swelling. Prolonged or repeated contact may result in defatting and dermatitis. Repeated skin contact may cause sensitization (allergic skin reaction) in some individuals.

INHALATION: Inhalation of vapors or mists may cause mucous membrane and upper respiratory tract irritation and central nervous system depression. Symptoms may include coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea, fatigue and unconsciousness.

INGESTION: Ingestion is an unlikely route of exposure for aerosol products. Swallowing may cause gastrointestinal irritation with abdominal pain, nausea, vomiting and diarrhea and central nervous system depression with symptoms including headache, dizziness, intoxication, weakness, nausea, and vomiting. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

CHRONIC HAZARDS: None expected

CARCINOGEN STATUS: None of the components of this product at greater than 0.1% are listed as carcinogens by OSHA, IARC or NTP.

ACUTE TOXICITY: Toxicological testing has not been performed on this product as a mixture.
Severely Hydrotreated Petroleum Distillates: Oral rat LD50 >5000 mg/kg, Dermal rabbit LD50 >2000 mg/kg, Inhalation rat LC50 2.18 mg/L/4hr
LVP Aliphatic Hydrocarbon: Oral rat LD50 >2000 mg/kg, Dermal rat LD50 >5000 mg/kg, Inhalation rat LC50 > 6.8 mg/L/4 hr.
Terpene Alcohol: Oral rat LD50 3200 mg/kg, Dermal rabbit LD50 5000 mg/kg
Diisobutyl Ketone: Oral rat LD50 5233 mg/kg, Dermal rat LD50 >2000 mg/kg, Inhalation rat LC50 14.5 mg/L/4 hr.
Diacetone Alcohol: Oral rat LD50 3002 mg/kg, Dermal rat LD50 >1875 mg/kg, Inhalation rat LC50 >7.6 mg/L/4hr.
Isobutyl Alcohol: Oral rat LD50 > 2830 mg/kg, Inhalation rat LC50 24.6 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg
Carbon Dioxide: Inhalation rat LC50 167857 ppm/4hr

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: No toxicity data available for the product.
Severely Hydrotreated Petroleum Distillates: 48 hr EC50 daphnia magna >1000 mg/L
LVP Aliphatic Hydrocarbon: 96 hr LC50 Oncorhynchus mykiss 2.9 mg/L
Terpene Alcohol: 48 hr EC50 daphnia magna 17-28 mg/L
Diisobutyl Ketone: 96 hr LC50 Oncorhynchus mykiss 30 mg/L, 48 hr EC50 daphnia magna 37.2 mg/L,
Diacetone Alcohol: 96 hr. LC50 Oryzias latipes >100 mg/L; 48 hr. EC50 daphnia magna >1000 mg/L; 72 hr. EC50 Pseudokirchnerella subcapitata>1000 mg/L
Isobutyl Alcohol: 96 hr LC50 Pimephales promelas 1430 mg/L; 48 hr EC50 daphnia pulex 1100 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 1799 mg/L
Carbon Dioxide: 96 hr LC50 Oncorhynchus mykiss 35 mg/L

PERSISTENCE AND DEGRADABILITY: Diacetone Alcohol and Isobutyl Alcohol are readily biodegradable.

BIOACCUMULATIVE POTENTIAL: No data available.

MOBILITY IN SOIL: No data available

OTHER ADVERSE EFFECTS: None known

SECTION 13: DISPOSAL INFORMATION

DISPOSAL INSTRUCTIONS: Dispose of product in accordance with all local, state/provincial and federal regulations. Do not puncture or incinerate.

CONTAMINATED PACKAGING: Offer empty packaging material to local recycling facilities.

SECTION 14: TRANSPORT INFORMATION

	UN NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PACKING GROUP	ENVIRONMENTAL HAZARD
DOT / 49 CFR GROUND		Limited Quantity			
DOT AIR	UN1950	Aerosols, Flammable, Limited Quantity	2.1	None	None
IMDG	UN1950	Aerosols, Limited Quantity	2.1	None	None
IATA	UN1950	Aerosols, Flammable, Limited Quantity	2.1	None	None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: This product has a Reportable Quantity (RQ) of 166,666 lbs. (based on the RQ for Isobutyl Alcohol of 5,000 lbs present at <3%). Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category for Section 311/312: Refer to Section 2 for the OSHA Hazard Classification

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None.

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

Canadian DSL: All of the components of this product are listed on the Canadian Domestic Substances List

SECTION 16: OTHER INFORMATION

HMIS RATINGS:	Health – 2	Flammability - 4	Physical Hazard - 0
NFPA RATINGS:	Health - 2	Flammability - 2	Instability - 0

SDS REVISION HISTORY: Updated Section 3, 8, 11, 12, and 15.

DATE OF PREPARATION: August 23, 2022

DATE OF PREVIOUS REVISION-U.S.: June 10, 2021

DATE OF PREVIOUS REVISION-CANADA: July 20, 2022

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