

**KANO LABORATORIES LLC
SAFETY DATA SHEET**

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Kroil Penetrant with Graphite Aerosol (formerly known as Penephite)
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: July 8, 2022

SECTION 2: HAZARDS IDENTIFICATION

GHS / HAZCOM 2012 Classification:

| Health | Physical |
|--|--|
| Skin Irritation Category 2 Aspiration Hazard Category 1 | Flammable Aerosol Category 1 Gas Under Pressure: Compressed Gas |

Label Elements:

Danger!



Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
Causes skin irritation.
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.
Wear protective gloves.
IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.
Store locked up.
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 | 45-55 |
| LVP Aliphatic Hydrocarbon | 64742-47-8 | 20-40 |
| Diisobutyl Ketone | 108-83-8 | 5-15 |
| Carbon Dioxide Propellant | 124-38-9 | 1-5 |

The exact percentage has been withheld as a trade secret or is a variation in formula.

SECTION 4: FIRST AID MEASURES

Eye: Rinse thoroughly with water. Get medical attention if irritation occurs and persists.

Skin: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation 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 skin irritation. 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: Extremely 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 120°F 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 |
| Diisobutyl Ketone | 50 ppm TWA OSHA PEL |
| Carbon Dioxide Propellant | 5000 ppm TWA OSHA PEL 5000 ppm TWA ACGIH TLV 30000 ppm STEL 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 glasses or goggles recommended to avoid eye contact.

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: | Black liquid packaged as an aerosol | Odor: | Hydrocarbon-like |
| Odor Threshold: | Not available | pH: | Not available |
| Melting/Freezing Point: | Not available | Boiling Point/Range: | Not available |
| Flash Point: | 120.2°F (49°C) (Diisobutyl Ketone) | Evaporation Rate: | Not available |

| | | | |
|---|----------------|-----------------------------------|--|
| Flammability (Solid, Gas): | Not applicable | Flammability Limits: | UEL: 7.0% (LVP Aliphatic Hydrocarbon) LEL: 0.6% (LVP Aliphatic Hydrocarbon) |
| Vapor Pressure: | Not available | Vapor Density: | Not available |
| Relative Density: | Not available | Solubilities: | Negligible in Water |
| Partition Coefficient (N-Octanol/Water): | Not available | Auto ignition Temperature: | 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, organic compounds, smoke, and fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

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

Skin: May cause skin irritation with redness, rash, swelling. Prolonged or repeated contact may result in defatting and dermatitis.

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.
 Diisobutyl Ketone: Oral rat LD50 5233 mg/kg, Dermal rat LD50 >2000 mg/kg,
 Inhalation rat LC50 14.5 mg/L/4 hr.
 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
Diisobutyl Ketone: 96 hr LC50 Oncorhynchus mykiss 30 mg/L, 48 hr EC50 daphnia magna 37.2 mg/L,
Carbon Dioxide: 96 hr LC50 Oncorhynchus mykiss 35 mg/L

Persistence and Degradability: Diisobutyl Ketone is 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 is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state, and local regulations.

STATE REPORTING REGULATIONS:

California Proposition 65: This product does not contain substances known in the State of California to cause cancer and/or reproductive harm.

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 the components in this product are listed on the TSCA inventory.

International Chemical Inventories:

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

Australian Inventory of Chemical Substances: All the components in this product are listed on AICS.

New Zealand Inventory of Chemicals: All the components in this product are listed on the NZIoC.

China Inventory of Existing Chemicals and Chemical Substances: All the components in this product are listed on the IECSC for China.

| |
|--------------------------------------|
| SECTION 16: OTHER INFORMATION |
|--------------------------------------|

HMIS Ratings: Health - 2

Flammability - 2

Physical Hazard - 0

NFPA Ratings: Health - 2

Flammability - 2

Instability - 0

SDS Revision Comment: Updated Section 1 and Section 7-storage level

Date of Preparation: July 8, 2022

Date of Previous Revision: February 1, 2022

The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or the consequences of its use or misuse.