Material Safety Data Sheet

Product name:	Tool Grinding Oil	**Prepared according**	GB/T 16483, GB/T 17519
First edited on:	2018-11-14	**SDS number:**	KERUN-SDS-KR-C05T
Revised on:	2019-06-14	**Version:**	2.0

PART 1 IDENTIFICATION OF PRODUCT AND SUPPLIER

Chemical English name: Tool grinding oil
Product Code: KR-C05T
Company name: NANJING KERUN LUBRICANTS CO. LTD.
Address: NO.31,Qinhuai Rd Jiangning, Nanjing, Jiangsu
Zip code: 211000
Contact number: 025-52128747； 025-52124889
Fax: 025-52101342
Email address: mk@njkerun.com
Emergency phone: 4008-818-101
Product use: Suitable for grinding processes of hard alloy cutting tools.

PART 2 HAZARDS IDENTIFICATION

GHS Classification:

Acute toxic-Inhalation Category 4
Inhalation Hazard Category 1

Label elements:

Pictograms

Cautionary Note: Dangerous



Hazard statements:
H332 - Inhalation hazard.
H304 - Swallowing or entry into respiratory tract can be fatal

- Precautionary statement:

Precaution:
P261 - Avoid inhaling dust, smoke, gas, smog, steam and spray.
P271 - Only use outdoors or well-ventilated place.
P280 - Wear protective gloves, glasses, mask and suit.
P264 - Wash hands after operating.

- Accident:

P304 + P340 - If inhaled, move the patient to area with fresh air and keep a resting gesture that can breathe comfortably.
P312 - If felt uncomfortable, call detoxification center or go to the doctor.
P301 + P310 + P331 - If swallowed: Call a poison center/ doctor immediately.
P331 - Do not induce vomiting.

- Safe storage:

P405 – Lock the storage place.

- Disposal:

P501 - Dispose of contents and container in accordance with the local / regional / national / international regulations.

Physical and chemical hazards:
Chemical characteristic is stable under common temperature.
Health hazards:
Chronic toxicity: None.
Acute toxicity: swallowing, inhalation may cause discomfort.
Environmental hazard:
Harmful to the aquatic environment.

PART 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance □ **Preparation**

Ingredient name	Content (%)	CAS No.
BASIC OIL(GTL)	50-100	-
LUBRICANT ADDITIVES	1-5	-

PART 4 FIRST AID MEASURES

Inhalation: If inhaled, move to an area with fresh air. If symptoms occur, seek medical assistance.
Ingestion: Do not induce vomiting. Do not give anything by mouth to an unconscious person. If unconscious, place in the recovery position and seek immediate medical attention. Swallowing may cause respiratory distress and can enter the lungs, causing lung damage. Seek medical attention immediately.
Skin Contact: Wash skin thoroughly with soap and water or use an approved skin cleanser. Remove contaminated clothing and shoes. Launder clothing before reuse. Thoroughly clean shoes before reuse. If symptoms develop, seek medical assistance.
Eye Contact: In case of eye contact, immediately rinse eyes with plenty of water for at least 15 minutes. Lift the eyelids and ensure thorough rinsing. Remove any contact lenses and seek medical attention.

Counsel for protecting the rescuer:

Do not take action if there is any personal danger or if you have not received proper training.

If mouth-to-mouth breathing is used for rescue, it may be dangerous to the rescuer.

Special tips for doctors:

Treatment should typically be directed at addressing symptoms and directly alleviating any effects.

Swallowing or subsequent reflux of stomach contents can lead to aspiration of the product, potentially causing a life-threatening chemical pneumonitis that requires urgent treatment. Due to the risk of aspiration, vomiting and gastric lavage should be avoided. Gastric lavage should only be performed after endotracheal intubation. Monitor for the occurrence of cardiac arrhythmias.

PART 5 FIRE-FIGHTING MEASURES

Fire-fighting methods and extinguishing agents:

Suitable: Use foam or multi-purpose dry chemical fire extinguishers.

Not Suitable: Prohibit direct water spray.

Special Hazards:

Burning may produce harmful gases such as carbon dioxide, carbon monoxide, sulfur oxides, etc..

Precautions for firefighting:

In case of a fire, evacuate all personnel from the disaster area and nearby areas to isolate the scene quickly. Do not take action if there is any danger to personal safety or if proper training has not been received.

Firefighters should wear positive-pressure self-contained breathing apparatus (SCBA) and full protective gear.

PART 6 ACCIDENTAL RELEASE MEASURES

Protective measures for operators, protective equipment, and emergency procedures:

For Non-Emergency Responders:

Do not take action if there is any danger to personal safety or if proper training has not been received. Evacuate the surrounding area.

Prevent unauthorized personnel and individuals without proper protective equipment from entering. Avoid contact with or walking through spilled substances.

Avoid inhaling vapors or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment.

Floors may be slippery; take precautions to avoid slipping. Contact emergency personnel.

For Emergency Responders:

To prevent danger, when entering confined spaces or poorly ventilated areas contaminated with vapor, mist, and gas, always wear the appropriate respiratory protection equipment and the necessary equipment for safe work. Wear self-contained breathing apparatus and appropriate chemical protective clothing.
Resistant to chemical corrosion boots. See information in the "For Non-Emergency Responders" section.

Environmental protection measures:

Prevent the spread and runoff of spilled material, and avoid contact with soil, rivers, sewers, and wastewater pipes. If the product has already caused environmental contamination (sewers, waterways, soil, or air), please inform the relevant authorities. The spilled material can be harmful to the environment. Collect the spill.

Methods and materials to collect and clean the leaking chemicals:

Small leaks:If there is no danger, stop the leak. Remove the container from the leak area. Absorb with inert materials and place in an appropriate waste disposal container. Dispose through a licensed waste disposal contractor.
Sever leaks: If there is no danger, stop the leak. Remove the container from the leak area. Approach the spill from upwind. Prevent entry into sewers, waterways, basements, or confined areas. Use non-combustible absorbents such as sand, soil, vermiculite, or diatomaceous earth to control and collect the spill material. Place in a container for disposal in accordance with local regulations. Contaminated absorbents may present the same hazards as the spilled product. Dispose through a licensed waste disposal contractor.

PART 7 HANDLING AND STORAGE

Operational Notes:

Wear appropriate personal protective equipment (refer to section 8). Avoid inhaling vapors or smoke. Prevent contact with soil and entry into drains for spilled material. Avoid contact with eyes, skin, and clothing. Empty containers may retain product residues and can be very hazardous. Keep in the original container or approved alternatives made of compatible materials when not in use. Do not reuse containers.Avoid contact, operate only after specialized guidance. Avoid exposure during pregnancy and breastfeeding. Do not swallow. Swallowing may cause respiratory distress and can enter the lungs, causing lung damage. Do not siphon with the mouth. Concentration of mist, smoke, and vapors in confined spaces may form explosive atmospheres. Excessive splashing, stirring, or heating must be avoided. In metalworking processes, solid particles in workpieces or tools can contaminate the fluid, potentially causing skin abrasions when such abrasions occur, appropriate first aid should be administered.In metalworking processes, some metals, such as chromium, cobalt, and nickel, can contaminate metalworking fluids and generate bacteria, resulting in allergies or other skin reactions, especially when personal hygiene is poor. General occupational health advice:

Eating and smoking should be prohibited in the area where this substance is handled, stored, and processed. After work, thoroughly rinse. Before entering eating areas, remove contaminated clothing and protective equipment.

Storage Notes:

Store according to local regulatory requirements. Keep in the original container, protect from direct sunlight, and store in a dry, cool, well-ventilated area, away from incompatible materials (see section 10), food, and beverages. The storage area should be locked. Keep containers tightly closed and sealed before use. Use only equipment/containers specifically designed for this product when storing or using. Carefully reseal opened containers and store them upright to prevent leaks. Do not store in unlabeled containers. Use appropriate containment measures to prevent environmental contamination.

PART 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits:

No data.

Engineering control

Health risks associated with all chemical operations must be assessed in advance to ensure the reasonable control of chemical exposure. Personal protective equipment should only be considered after appropriate assessment of other forms of control measures, such as engineering controls. Personal protective equipment should meet relevant standards, be suitable for use, in good condition, and properly maintained. Consult with personal protective equipment suppliers for advice on equipment selection and relevant standards. For detailed information, please contact the relevant standard-setting agency in your country or region. Provide exhaust ventilation or other engineering controls to ensure that the concentration of relevant substances in the air is below occupational exposure limit standards. The final choice of protective equipment depends on the risk assessment. Ensuring compatibility and proper use of various personal protective equipment is crucial.

Personal protective measures

Health measures

After contact with chemicals, thoroughly wash hands, forearms, and face before eating, smoking, using the restroom, and at the end of the work. Use appropriate techniques to remove potentially contaminated clothing. Contaminated clothing should be laundered before reuse. Ensure that eyewash stations and safety showers are located near the work area.

Hand protection

If there is potential for prolonged or repeated contact, wear protective gloves. Wear chemical-resistant gloves. Recommendation: Nitrile gloves. The correct selection of protective gloves depends on the specific chemicals being handled, the work environment, and the conditions of use. Gloves can deteriorate, even the best chemical-resistant gloves,

after repeated exposure to chemicals. Most gloves provide protection for a limited time and must be discarded and replaced. Because the working environment and materials handled may vary, safety measures must be established for each specific use. Therefore, when choosing gloves, consult the supplier/manufacturer and thoroughly assess working conditions.

Eye protection

Wear safety goggles with side shields.

Skin&body protection

If there is no direct contact with the product, protective measures are not necessary. When the product may come into contact with the skin, waterproof gloves should be worn. Gloves must be inspected before use. Please use an appropriate method to remove the gloves without touching the outer surface of the gloves, and avoid any skin contact with the product. Clean and dry hands afterwards. After use, contaminated gloves should be handled with caution according to relevant laws, regulations, and effective laboratory procedures.

Respiratory Protection

Wear appropriate respiratory protection in poorly ventilated areas. The correct selection of respiratory protection equipment depends on the chemicals being handled, working conditions, and the condition of the respiratory equipment. Safety procedures must be established for each planned application. Therefore, when choosing respiratory protection equipment, consult with the supplier/manufacturer and thoroughly assess working conditions.

PART 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and traits: Colorless to light color transparent liquid

Odor: No data	**Relative Density (water = 1):** 0.80
pH value:（5wt%）: No data	**Solubility:** Insoluble in water
Freezing Point（°C）: No data	**n-Octanol/Water Partition Coefficient（log P）:** No data
Boiling Point（°C）: No data	**Autoignition Temperature（°C）:** No data
Flash Point （°C）: ≥150 (open cup)	**Decomposition Temperature（°C）:** No data
Upper Explosive Limits(%volume fraction): No data	**Odor Threshold (mg/m3):** No data
Lower Explosive Limits(%volume fraction): No data	**Evaporation Rate (n-Butyl Acetate = 1):** No data

Saturated Vapor Pressure (kPa): No data	**Flammability(solid,gas):**Not applicable
Relative Vapor Density (air = 1): No data	**Viscosity (mm2/s):** 5.9 at 40 °C

PART 10 STABILITY AND REACTIVITY

Stability:

It is stable under recommended storage conditions.

Hazardous Reactions:

No hazardous chemical reactions occur during normal storage and use. Under normal storage and usage conditions, no hazardous polymerization reaction occurs.

Conditions to avoid:

Avoid overheating.

Incompatible materials:

Reactive with or incompatible with oxidizing agents.

Hazardous decomposition products:

Under normal storage and usage conditions, no hazardous decomposition products are generated.

PART 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

No data.

Skin Irritation or Corrosion:

Causes skin irritation. De-fatting to the skin.

Eye Irritation or Corrosion:

May cause eye irritation.

Respiratory or Skin Sensitization:

Prolonged and frequent direct contact may lead to skin discoloration or sensitization.

Germ Cell Mutagenicity:

No data.

Carcinogenicity:

No data.

Reproductive Toxicity:

No data.

Specific Target Organ Toxicity - Single Exposure:

No data.

Specific Target Organ Toxicity - Repeated Exposure:

No data.

Inhalation Hazard:
Vapors may irritate the nose and throat.

PART 12 ECOLOGICAL INFORMATION

Ecotoxicity:
Harmful to aquatic life with long-lasting effects in aquatic environments.
Persistence and Degradability:
Partially biodegradable.
Bioaccumulation:
No data.
Mobility in Soil:
No data.

PART 13 DISPOSAL CONSIDERATIONS

Waste Chemicals:
Avoid generating waste as much as possible. If unavoidable, dispose of it in accordance with national and local regulations.Do not dispose of this product by discharging it into the sewer.
Contaminated Packaging:
Safely empty the container, tightly seal it, and return it to the manufacturer or ship it to a qualified recycling or purification facility. All containers should be disposed of in accordance with national and local regulations.
Waste Disposal Considerations:
Refer to relevant national and local regulations before disposing of waste.
Safety precautions for disposal personnel are outlined in section 8.

PART 14 TRANSPORT INFORMATION

United Nations Dangerous Goods Code (UN number): 3295.
UN proper shipping name: Liquid hydrocarbons, not otherwise specified.
UN risk classification: 3.
Packing group: III.
Marine Pollutant (Yes/No): No.
Transportation Precautions: Railway transportation should strictly follow the dangerous goods packaging table in the "Dangerous Goods Transportation Regulations" of the Ministry of Railways for packaging. The packaging must be intact at the time of departure, and the loading must be secure. During transportation, it is necessary to ensure that the containers do not leak, collapse, fall, or be damaged. It is strictly prohibited to mix and transport with

halogens, alkalies, flammable substances, combustible substances, edible chemicals, and other substances. Transport vehicles should be equipped with emergency leakage handling equipment. During transportation, exposure to sunlight and high temperatures should be prevented.

PART 15 REGULATORY INFORMATION

The following laws, regulations, rules, and standards have made corresponding provisions for the management of this chemical.

"Regulations on the Safety Management of Hazardous Chemicals" (State Council Order No. 344, promulgated on January 26, 2002, revised and approved at the 144th executive meeting of the State Council on February 16, 2011) and the "Regulations on the Safe Use of Chemicals in the Workplace" (Labor Department Circular [1996] No. 423), among others. These regulations provide relevant provisions for the safe use, production, storage, transportation, and handling of hazardous chemicals.

PART 16 OTHER INFORMATION

Disclaimer:

The information in this SDS is valid for the products specified and does not apply to mixtures containing this product with other substances, unless otherwise specified. This SDS is intended for those who use this product only with proper professional training to provide information on product safety. Users of this SDS must make independent judgments regarding the suitability of SDS under special conditions of use. Under special conditions of use, the authors of this SDS will not be held responsible for any injury caused by the use of this SDS.