

Material Safety Data Sheet

KunLun TianRun KR5 (Economical and high quality Gasoline)

Version: A2

Release Date: April 10, 2015.

Section 1 Product and Company Identification

Product Name: SF 10W-30/15W-40 Gasoline Engine Oil

Product Type: Engine Oil

Trade Name: KunLun TianRun KR5 (Economical and high quality Gasoline)

Recommended Use: Gasoline Engine and Gas Engine

Service Call: 400-810-3000 800-810-3001

Website: <http://www.kunlunlube.com.cn>

Manufacturer: PetroChina Lubricant Company

Address: 17/F Building A, PetroChina KunLun Plaza, No.8 Taiyanggong Jinxingyuan, Chaoyang District Beijing, China

Fax: 0086-10-63592290

Emergency Call: 0086-10-62095168

Section 2 Composition/Information of Ingredient

This product is mixture of refined lubricating base oil and the additive, the composition content is listed by weight

Generic Composition: Severe treat min. oils & additives

Ingredient	Value(WT%)	CAS No.
Refined Base Oil	>85	
Additives	<15	
Reportable Hazardous Substance		
Zinc Dialkyl Dithiophosphate	<1	68649-42-3

Section 3 Hazards Identification

This Product is Class B Combustible Liquid according to National Standard "Fire Prevention Code of Petro-Chemical Enterprise Design".

This product is not classified as dangerous goods according to "List of Dangerous Goods"(GB12268). The product does not exist the unpredictable risk under normal condition of use.

Physical / chemical hazard class: Not classified as hazardous waste.

Health risk categories: no significant hazards.

Health hazards: This product may generate oil mist to cause skin and eye irritation, excessive exposure to liquid and oil mist may cause respiratory irritation and damage, and aggravate existing asthma and other respiratory diseases. The inadvertent large amounts are ingested severe damage to the digestive system; it is timely to take rescue measures.

Environmental Hazards: Be harmful to the environment, should prevent the pollution of soil,

water.

Section 4 First Aid measures

Inhalation: Rapidly take away to fresh air, keep ventilation. Seeking immediate medical assistance if dizziness, nausea or unconsciousness.

Ingestion: Induce vomiting by drinking enough water, a large number of swallows should be immediately sent to hospital for treatment to induce vomiting or other rescue measures under the guidance of a physician.

Eye Contact: Immediately open the upper and lower eyelids, Flush thoroughly with water and physiological saline. If irritation occurs, get medical assistance.

Skin Contact: Wash contact areas with water and soap. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency.

Section 5 Fire Fight Measures

Risk Characteristics: Flash Point (COC) > 205 °C, can cause combustion by fire, high temperature or oxidant.

Hazardous Combustion Products: CO/CO₂/Sulfide/ Suspended Solid Particles and Complex Combustion Mixture

Fire Fighting Instructions: Firefighters are required to wear gas masks and firefighting suits, Put out fire downwind. Take containers away from the scene to empty Department. Evacuate immediately when color change of containers or sound from the pressure relief safety devices.

Extinguishing Media: Dry chemical, carbon dioxide (CO₂), foam or sand. Do not use a direct stream of water.

Section 6 Accidental Release Measures

Emergency Treatment: When a leak is discovered, immediately cut off the source of fire, isolate combustible. After risk assessment, organize contaminated areas personnel to a safe area if necessary. Must wear personal safety protection equipment when cleaning leakage and should pay attention to prevent secondary disasters such as personal injury and environmental pollution during emergency rescue.

A small leak: collecting leaking liquid in a sealed container as much as possible, use sand, activated carbon or other inert materials to absorb the residue. Can also use non-flammable dispersant made of latex to wash, lotion needs harmless disposal.

Large Leak: briefing to the relevant departments according to the degree of risk. Build a causeway or trenching asylum. Transferred to a sealed container with a pump and recycling or shipped to waste disposal sites.

Section 7 Handling and Storage

Handling Precautions: comply with the fire safety design specification requirements when using this product and avoid excessive oil mist generated during the operation. The operator should be subject to fire safety training, equipped with the necessary labor protective equipment to avoid inhalation of oil mist, eliminate leakage of production and operating equipment and avoid slipping.

Storage Note: This product should be sealed storage, stored in a cool, dry, ventilated place, away from open flames and high temperature heat, strong oxidants and flammable materials,

to avoid mixing with water and impurities and other foreign matter. The storage area should be equipped with the necessary fire equipment, leakage processing equipment. Empty containers may still remain product, avoid heating, cutting, welding.

Section 8 Exposure Control/Personal Protection

Exposure limits: When mists can occur, the following are recommended: 5 mg/m³- ACGIH TLV, 10 mg/m³- ACGIH STEL.

Engineering Controls: No special requirements under ordinary conditions of use and with adequate ventilation

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Hand Protection: Wear suitable oil-resistant protective gloves made by Nitrile rubber or high quality PVC.

Skin and Body Protection: Wear protective clothing if there is a risk of skin contact and change them frequently, or when contaminated.

Respiratory Protection: use engineering controls to maintain adequate ventilation and avoid oil mist. If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Recommend wearing purifying dust or mist particulate air-purifying respirators or self-contained breathing apparatus.

Section 9 Physical and Chemical Properties

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

Appearance: Transparent Liquid

Odor: Characteristic, nonirritant

Density(kg/m³, 20°C): 840-900

Flash Point (COC, °C) : >205

Solubility: Insoluble in water, soluble in alcohols, ethers, ketones, grease, hydrocarbons, most of the organic solution

Section 10 Stability and Reactivity

Stability: Stable at normal conditions

Avoid: Excessive highly oxidizing agents.

Avoid condition: Open flame, high heat resource

Hazardous: Product does not decompose at ambient temperatures.

Decomposition Products: Material does not decompose at ambient temperatures.

Decomposition Products: Polymerization will not occur

Section 11 Toxicological Information

The information given is based on data available for the material, the components of the material, and similar materials.

Acute toxicity:

Oral (Rat): Studies available indicate oral and dermal LD50 s of >2000 mg/Kg which is considered as low acute toxicity.

Inhalation (Rat): Studies available indicate oral and dermal LC50 s of >10 mg/L which is considered as low acute toxicity.

Skin contact (Rabbit): Prolonged or repeated exposure may lead to defatting of the skin and subsequent irritation.

Eye contact (Rabbit): May cause redness and transient pain.

Respiratory tract, skin allergies and carcinogenicity: highly refined base oil is non-carcinogenic in animal experiments. However, oil deposition, inflammation and oil tumor animals will produce when animals are exposed to high concentrations of oil mist in the respiratory system. Oils in pyrolysis are mixed with waste oil may produce polycyclic aromatic compounds or pollutants caused by bacteria. May cause cancer or cause severe respiratory damage.

Germ cell mutagenicity: No data available

Reproductive toxicity: No data available

Section 12 Ecological Information

The information given is based on data available for the material, the components of the material, and similar materials.

Ecotoxicity: Not expected to be harmful to aquatic organisms, but potential bioaccumulate may cause ecotoxicity.

Mobility: Non-volatilized liquid, no oil mist pollution to air; Low solubility and floats and is expected to migrate from water to the land. Expected to partition with sediment and wastewater solids.

Persistence/degradability: The base oil is expected to be inherently biodegradable with potential bioaccumulation.

Section 13 Disposal Consideration

Disposal Recommendations: Waste Mineral Oils listed in HW08 of “National Catalogue of Hazardous Wastes”

Regulatory Disposal Information: Comply with local laws and regulations. If possible, should be entrusted with the appropriate qualified hazardous waste disposal agency for product recycling. Recommended as a boiler fuel under controlled conditions and monitor the emission gases harmful substances of high-temperature combustion. Airtight container stored and the necessary identification when temporary saves.

Section 14 Transportation Information

“List of Dangerous Goods”(GB12268): The product is not classified as 9 categories of hazardous goods

China / international transport regulations: Not Regulated for Land Transport

SEA (IMDG): Not Regulated for Sea Transport

AIR (IATA): Not Regulated for Air Transport

Section 15 Regulatory Information

This product is not classified as dangerous goods, and therefore does not apply to the Chinese “Regulations on the Control over Safety of Dangerous Chemicals”, but as a flammable liquid should meet “Law of the People's Republic of China on Work safety” and “Fire Control Law of the People's Republic of China” when use, storage, transport, handling and other aspects.

Waste disposal should comply with the corresponding provisions of the “Environmental Protection Law of the People's Republic of China” and “Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste” the area environmental emissions standards.

Comply with the chemicals directory requirements of the following countries and regions: IECSC (China), DSL (Canada), EINECS (EU), on ENCS (Japan), KECI (Korea), PICCS (Philippines), TSCA (United States) and AICS (Australia).

Section 16 Other Information

This material safety data sheet is based on current knowledge and applicable laws and regulations, the description of the product from the health, safety and environmental requirements, having possibility of amendments to update existing reference standards and testing data.

The data and recommendations provided by the material Safety Data Sheet are only apply to this product. In addition to the prescribed use, China Petroleum oil company will not be held responsible due to failure to follow recommended any damage or injury caused by the views,. Users can get additional information by the sales department and technical service department.