MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product/ Chemical Name:	Top-grade Grease 2#
General use:	Industrial lubricating grease
Product Code:	N/A
Manufacturer/Supplier:	
Tel.:	
Fax.:	
Emergency tel.:	
Revision Date:	22th MAR. 2022

2. HAZARDS IDENTIFICATION

Health hazard	No specific hazard when used as intended, prolonged or repeated exposure may cause dermatitis. Used grease may contain hazardous foreign materials.
Fire and explosion hazard	Not defined as inflammable, but it is still flammable.
Environmental Hazard	Not defined in the classification of environmental hazard.
Infection approach	Not applicable.

3. COMPOSITION AND INGREDIENTS

Ingredients

Description of ingredients	A kind of grease that containing highly refined mineral oil and additives. According to IP346, this highly refined mineral oil contains＜3% (w/w) of DMSO abstract.

4.FIRST AID MEASURES

Symptom and effect	Not expected to cause serious hazard when used as intended.
Inhalation	Not expected to cause faint, if occurs, move the victim to fresh air. If discomfort persists, contact a physician.
Skin contact	Take off the contaminated clothes, wash effected skin by using water and soap. If discomfort persists, contact a physician. When using high-pressure equipment, this product may be injected into subcutaneous ski. In case of it, please send the injured to hospital for medical treatment immediately, do not wait in case of symptomatic deterioration.
Eye contact	Flush with large amount of water. If discomfort persists, contact a physician.
Ingestion	Wash mouth and get medical advice. Do not induce vomiting.
Information for doctor	Symptomatic treatment. Inhalation to lung may cause chemical pneumonitis. Prolonged or repeated exposure may cause dermatitis. Injury of high-pressure injection requires immediate surgical treatment and/or systemic corticosteriods treatment, so as to reduce the organization injury and defunctionalization.

5. FIRE FIGHTING MEASURES

Make all non-first-aid personnel leave fire area.

Hazardous characteristics	Burning may cause complicated mixture composed of liquid, solid particles and gas, including carbon monoxide and unconcerned organic and inorganic compound.
Suitable extinguishing agents	Foam and dry chemical, carbon dioxide; sand or soil can only be used for small fire.
Unsuitable extinguishing agents	Do not spray water. Considering the environment, should avoid using halon fire extinguisher.
Protective equipment for firefighters	Suitable protective devices, including closing to the ignition source in sealed space, must wear breathing equipment.
Hazards combustion products	Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Avoid contacting spilled or released material. Regarding selection guide about personal protective equipment, refer to Section 8 of this MSDS. For disposal information, please refer to Section 13.

Protective measures	Avoid contacting with skin and eye. PVC, Neoprene or nitrile rubber gloves. Rubber long safety shoes, PVC clothes and trousers. If possible splashing, wear safety glasses or full face mask.
Environmental precautions	Use sand, soil or other suitable obstacles to prevent it expand or enter into drain, sewage or river. If fail to block it, inform local government authority.
Emergency processing	Small amount of leakage: put it into suitable labeled container, and dispose and recycle it according to local regulations. Large amount of spilling: same as small leakage.

7. HANDLING AND STORAGE

Precaution for safety handling	If there is risk of inhalation of oil vapor, oil mist or particles in air, local ventilation should be adopted. Avoid contacting with eyes, skin and respiratory system. When processing product in cylinder, wear safety shoes and use suitable process equipment to prevent spilling. Texture, paper and other materials absorbing oil are all fire risks, which should be processed timely and safely to avoid accumulation texture. Besides detailed suggestion to health, safety and environment control, we must conduct rick assessment, so as to help decide control measures that suitable to local conditions.
Precaution for storage	Store in a cool, well-ventilated place. Use right, labeled and sealed container. Avoid direct sunlight, heat and strong oxidant.
Temperature for storage	Min.0℃, max.50℃.
Materials for use recommended	Container or inner layer of the container, use low-carbon steel or high-density polyethylene.
Unsuitable material	Container or inner layers of the container, avoid use PVC.
Further information	Polyethylene container should not be placed in high temperature, because it may cause disformation.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Maximum acceptable concentration					
Substance	PEL	Duration of contact/exposure	Limitation of contact/exposure	Unit	Note

Oil mist, mineral oil	ACGIH	TWA	5	5 mg/m^3	
	ACGIH	STEL	10	5 mg/m^3	

Exposure information	Due to semisolid consistence of product, it is impossible to cause mist and dust.
Personal protection	If there is risk of inhalation of oil vapor, oil mist or particles in air, local ventilation should be adopted.
Respiratory protection	Usually not required. If oil mist cannot be controlled, should be equipped with respirator with function of steamed tanks with filtration of particles.
Protection of hands	PVV or nitrile rubber gloves
Eye protection	In case of spilling, please wear safety glasses or face mask.
Body protection	Reduce all kinds of skin contact. Should wear work clothes or oil-proof shoes. Wash work clothes and underwear periodically.
Environment exposure control	Reduce release to environment. Must conduct environment assessment to ensure it conform to the local environmental regulation.
Monitoring method	Not applicable.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appear and form	Semisolid uniform red factice in room temperature.
Odor	Feature of mineral oil.
pH	No data available.
Melting point/Freezing point	No data available.
Initial boiling point and range	No data available.
Flash point	＞220℃(COC) (Based on mineral oil)
Burning high-low limit	
Vapor pressure	No data available.
Vapor density(air=1)	＞1
Density	Classic Nearly 920kg/m^3（15 °C / 59 °F ）
Solubility	negligible
Partition coefficient: n-octyl alcohol/water	Low Pow. It is estimated no greater than 6.
Self-igniting temperature	＞200℃
Decomposition	＞200℃

temperature	
Dropping point	＞200℃

10. STABILITY AND REACTIVITY

Stability	Stable.
Conditions to avoid	Extreme temperature and direct sunlight.
Substance to avoid	Strong oxidant, strong acid and strong alkali, and strong corrosion.
Decomposition product	It is not expected to form hazardous decomposition product in normal storage process.
Polymerization hazard	Not applicable.

11. TOXICOLOGICAL INFORMATION

Basis for assessment	No toxicological data for this product. Information provided is based on ingredients and toxicological knowledge of similar product.
Acute toxicity **Oral acute toxicity** **Skin acute toxicity** **Respiratory acute toxicity**	 LD50 >2000mg/kg (estimated). LD50>2000mg/kg (estimated) No inhalation hazard in normal use.
Skin irritation or corrosion	May cause mild irritation.
Eye irritation or corrosion	May cause moderate irritation to eye (but the severity is not enough for classification).
Respiratory or skin sensibility	If inhale vapor, may cause mild irritation to respiratory tract.
Germ cell mutagenicity	Not considered with risk to induce organism mutagenicity.
Carcinogenicity	The product takes base oil as mineral oil, researches about covering of animal skin show that this kind of mineral oil will not cause cancer. No other ingredients are related with cancer.
Reproductive toxicity	No data available.
Specific targeted organ system toxicity **Single exposure** **Multi exposure**	No data available.
Inhalation hazard	No hard of inhalation in normal use.

Additional information:

Long-term and or repeated exposure product containing mineral oil will cause skin degreasing, especially in the condition of increasing temperature, which will cause irritation and dermatitis, which especially happen in condition of insufficient personal hygiene. Avoid skin contact as possible as you can. If this product is used for high-pressure subcutaneous injection, and not clear by surgical treatment, may cause local gangrene, and used grease may contain hazardous foreign matters accumulated in the process of using, and its concentration depends on usage condition, it will cause hazard to health and environment in processing. All used grease must be treated cautiously, and avoid contact with skin as possible as you can.

12. ECOLOGICAL INFORMATION

Basis for assessment	Ecological pathology data of this product is not determined, and the basis of all information is knowledge and ecotoxicity of ingredients of similar products.
Ecotoxicity	Insufficiently soluble mixture may cause the aquatic organism absorb external attachment. It is expected to be harmful to the aquatic organism: LL/EL50 10-100mg/L (LL/EL50 means the namely quantity required by extract of water test.
Mobility in soil	It is semisolid in most environmental conditions. Float on the river. If mix with soil, it will be absorbed by soil particles.
Persistence and degradability	It is expected not easy for degradability. The main ingredients are expected for degradation naturally, but this product may contain ingredients that keep in environment for long term.
Bioaccumulation	Ingredients contained may have bioaccumulation.

13. DISPOSAL CONSIDERATIONS

Disposal method	Place in a suitable, clearly labeled container, and dispose and recycle according to local regulation. The contractor can process this kind of product satisfactorily, and their ability should be known in advance. Do not let waste oil pollute soil, water or environment.
Product disposal	Refer to disposal method.
Disposal of container	Should be hand it to certified collector or contractor and recycle and dispose them according to laws.
Feature of waste	Waste mineral oil.

14.TRANSPORT INFORMATION

Transportation information	No hazard in transportation according to UN, IMO and IATA/CAO regulations.
ADR/RID classification	Void.
ADR/RID packing group	Void.
IMDR hazard classification	Void.
IMDG packing group	Void.
IATA/CAO hazard classification	Void.
IATA/CAO packing group	Void.
ADG special shipping information	Void.

15. REGULATORY INFORMATION

EC sign	None.
Danger words	Note classified.
Safety words	Note classified.
Other information	GB 6944-2005:Classification and code of dangerous goods GB/T 16483-2008:Content and order of material safety data sheet for chemical products GB 13690-1992: Classification of commonly used dangerous chemicals and sign GB 12268-2005: Name list of hazard cargo GBZ 2.1-2007:Occupational exposure limit of harmful factor in workplace

16.OTHER INFORMATION

Other information: information in this MSDS is worked out based on our current knowledge, the purpose of it is stating this product in terms of health, safety and environment regulations. This information cannot be considered as guarantee of performance of this product.

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