

Material Safety Data Sheet

Issued:DEC 01, 2010

MSDS No. 64742-54-7

TSS SPECIAL SPINDLE OIL

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product name: TSS SPECIAL SPINDLE OIL (YK70N)
Product type: Lubricating oil(Mineral Base Oil-碳氢化合物基礎油 99~100%)
Supplier: Tisasin Lubricant's Co., LTD.
Address: NO.25, DUNGYUAN 2ND ROAD;
JUNGLI INDUSTRYPARK, JUNGLI CITY,TAOYUAN, TAIWAN.
Contact numbers:
Telephone: 886-3-433-3125
Telex:
Fax 886-3-452-1665
Emergency telephone number:
<<EmergencyCover>> 886-3-433-3125

2. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation description: For highly-refined mineral oils
Dangerous components/constituents: On the basis of available information, the components of this preparation are not expected to impart hazardous properties to this product.

3. HAZARDS IDENTIFICATION

Human health hazards: No specific hazards under normal use conditions. Prolonged or repeated exposure may give rise to dermatitis.
Safety hazards: Not classified as flammable, but will burn.
Environmental hazards: Not readily biodegradable. Expected to have a high potential to bioaccumulate.
Other information: Not classified as dangerous for supply or conveyance.

4. FIRST AID MEASURES

Symptoms and effects: Not expected to give rise to an acute hazard under normal

	conditions of use.
First Aid - Inhalation:	Inhalation of any vapours from this product is not likely to present an acute hazard.
First Aid - Skin:	Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. If high pressure injection injuries occur, obtain medical attention immediately.
First Aid - Eye:	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
First Aid - Ingestion:	Wash out mouth with water and obtain medical attention. DO NOT INDUCE VOMITING.
Advice to physicians:	Treat symptomatically. Aspiration into the lungs may result in chemical pneumonitis. Dermatitis may result from prolonged or repeated exposure.

5. FIRE FLGHTING MEASURES

Specific hazards:	Combustion is likely to give rise a complex mixture of gases and airborne particulates, including carbon monoxide, oxides of sulphur, and unidentified organic and inorganic compounds.
Extinguishing media:	Foam and dry chemical powder. Carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media:	Water in a jet. Use of Halon extinguishers should be avoided for environmental reasons.
Protective equipment:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid contact with skin and eyes.
Personal protection:	Wear impermeable gloves and boots.
Environmental precautions:	Prevent from entering into drains, ditches or rivers. Inform local authorities if this cannot be prevented.
Clean-up methods - small spillage:	Shovel into a suitable, clearly marked container for disposal or reclamation in accordance with local regulations.

Clean-up methods - large spillage: As for small spills.

7. HANDLING AND STORAGE

Handling: When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages.

Storage: Keep in a cool, dry, well-ventilated place. Use properly labelled and closable containers. Avoid direct sunlight, heat sources, and strong oxidizing agents.

Storage temperature: 0°C minimum to 50°C maximum.

Recommended materials: Use mild steel or high density polyethylene (HDPE) for containers.

Unsuitable materials: Avoid PVC for containers or container linings.

Other information: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure standards: None established.

Hygiene measures: Wash hands before eating, drinking, smoking and using the toilet.

Respiratory protection: Not normally required.

Hand protection: PVC or nitrile rubber gloves

Eye protection: Wear safety glasses or full face shield if splashes are likely to occur.

Body protection: Minimise all forms of skin contact. Wear overalls to minimise contamination of personal clothing. Launder overalls and undergarments regularly.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Colour: L0.5

Odour: None
Vapour pressure:
Density: 0.8642
Vapour density (air=1):
Pour point °C: -20
Flash point: 178°C
Flammability limit - lower:
Flammability limit - upper:
Auto-ignition temperature:
Solubility in water:
n-octanol/water partition coefficient:
Elements content:

10. STABILITY/REACTIVITY

Stability: Stable
Conditions to avoid: direct sunlight.
Materials to avoid: Strong oxidizing agents
Hazardous decomposition products: Hazardous decomposition products are not expected to form during normal storage.

11. TOXICOLOGICAL INFORMATION

Basis for assessment: Toxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the toxicology of similar products.

Acute toxicity - oral: LD50 expected to be above 2000 mg/kg
Acute toxicity - dermal: LD50 expected to be above 2000 mg/kg
Eye irritation: Expected to be slightly irritant.
Skin irritation: Expected to be slightly irritant.
Respiratory irritation: If vapours are inhaled, slight irritation of the respiratory tract may occur.
Skin sensitization: Not expected to be a skin sensitizer.
Carcinogenicity: Product is based on mineral oils of types shown to be non-

Mutagenicity:

carcinogenic in animal skin-painting studies. Other components are not known to be associated with carcinogenic effects.

Other information:

Not considered to be a mutagenic hazard

Prolonged and/or repeated contact with products containing mineral oils can result in defatting of the skin, particularly at elevated temperatures. This can lead to irritation and possibly dermatitis, especially under conditions of poor personal hygiene. Skin contact should be minimised.

12. ECOLOGICAL INFORMATION

Basis for assessment:

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Mobility:

Semi-solid under most environmental conditions. Floats on water. If it comes into contact with soil, it will strongly adsorb to soil particles.

Persistence/degradability:

Not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

Bioaccumulation:

Has the potential to bioaccumulate.

Ecotoxicity:

Poorly soluble mixture. Product is expected to be practically non-toxic to aquatic organisms, LC/EC₅₀ > 100 mg/L. May cause physical fouling of aquatic organisms.

(LC/EC₅₀ expressed as the nominal amount of product required to prepare aqueous test extract).

13. DISPOSAL CONSIDERATIONS

Waste disposal:

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

Product disposal:

As for waste disposal.

Container disposal: 200 litre drums should be emptied and returned to the supplier or sent to a drum reconditioner without removing or defacing markings or labels.
Non-reusable small metal and plastic containers should be recycled where possible, or disposed of as domestic refuse.

Local legislation:

14. TRANSPORT INFORMATION

Not dangerous for conveyance under UN, IMO, ADR/RID and IATA/ICAO codes.

15. REGULATORY INFORMATION

EC Classification: Not classified as Dangerous under EC criteria
EINECS (EC): All components listed or polymer exempt
TSCA (USA): All components listed.
Other information: For listing on other inventories, eg MITI (Japan), AICS (Australia) and DSL (Canada), please consult suppliers.

16. OTHER INFORMATION

Uses and restrictions: Complex mixture of petroleum hydrocarbons.

Technical contact point:

Technical contact number:

Telephone: 886-3-433-3125

Telex:

Fax: 886-3-452-1665

SDS history: Edition number: 4

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Revisions highlighted: Newformat and minor editorial changes.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.