

**MATERIAL SAFETY DATA SHEET (MSDS)**

Product Refined Base Oil  
 Date of Preparation May 2009

**1. PRODUCT AND COMPANY DESCRIPTION**

Product / Trade Name Base Oil SN 500/SN150/SN300  
 Use For producing Lubricant and Hydraulic oil.  
 Company Name Benzene International Pte Ltd  
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**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name of the Substance : Lubrication Oil  
 Chemical Family : Hydrocarbon  
 CAS number : 72623-86-0

**Ingredients**

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Paraffinic oils	Mixture	60-100 %
Naphthenic Oils	Mixture	10 – 40 %
Aromatic Oils	Mixture	0 – 10%

**3. HAZARDS IDENTIFICATION**
**NON-HAZARDOUS SUBSTANCE**
**NON-DANGEROUS GOODS**
**NFPA 704 Hazard Class:**

Health : 0 (Least)  
 Flammability : 1 (Slight)  
 Instability : 0 (Least)

**HMIS Hazard Class:**

Health : 0 (Least)  
 Flammability : 1 (Slight)  
 Instability : 0 (Least)

**Potential Health Effects:**

**Eye** Not known to be an eye irritant.

**Skin** Not known to be a skin irritant. No harmful effects from skin absorption have been reported.

**Inhalation (Breathing)** No harmful effects reported.

**Ingestion (Swallowing)** No harmful effects reported from ingestion.

**Signs and Symptoms** Effects of overexposure may include irritation of the digestive tract, irritation of the nose and throat, diarrhea

#### 4. FIRST AID MEASURES

##### Emergency Overview

###### **Skin**

First aid is normally not required. However, it is good practice to wash any chemical from the skin.

###### **Inhalation (Breathing)**

First aid is normally not required. If breathing difficulties develop, move victim away from source of exposure and into fresh air. Seek immediate medical attention.

###### **Ingestion (Swallowing)**

First aid is normally not required; however, if swallowed and symptoms develop, seek medical attention.

###### **Notes to Physician**

Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

#### 5. FIRE FIGHTING MEASURES

##### **Extinguishing Media**

Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

##### **Fire Fighting Instructions**

For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant.

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

**6. ACCIDENTAL RELEASE MEASURES**

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release.

Stay upwind and away from spill/release. Notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant.

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines.

**7. TRANSPORTATION AND STORAGE**
**Transportation**

While transits keep the tanker vent open and the earthing chain must touch the ground.

**Storage**

Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material. Protect container(s) against physical damage.

**Handling**

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

**Ventilation**

Normal ventilation is adequate

### 9. Personal Protection Equipment:

#### Respiratory

A NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used under Protection provided by air purifying respirators is limited. Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection

#### Skin

The use of gloves impervious to the specific material handled is advised to prevent skin contact and possible irritation (see manufacturers literature for information on permeability). Examples of approved materials are nitrile and neoprene.

#### Eye/Face

While contact with this material is not expected to cause irritation, the use of approved eye protection to safeguard against potential eye contact is considered good practice.

#### Other Protective Equipment

A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

### 10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Brown / dark colour medium viscous Oil
Odor	:	Petroleum (Hydro carbon) odour
Boiling Point/ Range	:	>300 deg C
Pour Point	:	-6 deg C
Decomposition	:	None
Kinematic Viscosity	:	(46 – 50) Cst
Water Solubility	:	Insoluble
Density at 15 deg C	:	(0.8700 – 0.8900) g/ml
Evaporation Rate	:	N/A
Sediment	:	(0)%
Flash Point	:	200 deg C Min.

**13. STABILITY AND REACTIVITY**
**Stability**

Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Materials to Avoid**

Avoid all possible sources of ignition & Strong oxidizing agents.

**Hazardous Decomposition Products**

Combustion can yield carbon, nitrogen and sulfur oxides.

**14. TRANSPORT INFORMATION**
**Transport Information**

Not specified as Dangerous Goods, according to the Australian Code For the Transport of Dangerous Goods by road and rail.

**U.N. Number**

Non Allocated.

**Proper Shipping Name**

Non Allocated.

**DG Class**

Non Allocated.

**Hazchem Code**

Non Allocated.

**Packing Group**

Non Allocated

**15. DISPOSAL CONSIDERATIONS**
**Contaminated Packaging**

If recycling is not practicable, dispose of in compliance with the Environmental Protection (Duty of Care) Regulations 1991 if contaminated with hazardous materials. May be disposed of in neat form

The Information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and is not valid for such material used in combination with any other material ore in any process, unless specified in the text