



**SAFETY DATA SHEET**  
**Base Oil Ultra-S 4 (100 Neutral)**

**1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

<b>PRODUCT NAME</b>	Base Oil Ultra-S 4 (100 Neutral)		
<b>APPLICATION</b>	Lubricating Oil Base Stock		
<b>SUPPLIER</b>		<b>MANUFACTURER</b>	S-OIL CORPORATION 63B/D, 60 Yoido-dong, Yongdungpo-gu, Seoul 150-607 Korea
<b>EMERGENCY TELEPHONE</b>	+82-52-231-2256		

**2 HAZARDS IDENTIFICATION**

**HAZARD CLASSIFICATION IN ACCORDANCE WITH GHS**

Physical and Chemical Hazards	Not classified.
Human health	Asp. Tox. 1 - H304
Environment	Not classified.

**LABEL IN ACCORDANCE WITH GHS**



**HAZARD STATEMENTS**

H304 May be fatal if swallowed and enters airways.

**PRECAUTIONARY STATEMENTS**

P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331	Do NOT induce vomiting.
P405	Store locked up.

**3 COMPOSITION/INFORMATION ON INGREDIENTS**

SUBSTANCE NAME	CAS NO.	PURITY (%)
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	100

**3 COMPOSITION/INFORMATION ON INGREDIENTS**

**Distillates (petroleum), hydrotreated heavy paraffinic** **100%**

**CAS-No.: 64742-54-7**

**EC No.: 265-157-1**

Classification (EC 1272/2008)

Classification (67/548/EEC)

Asp. Tox. 1 - H304

Xn;R65.

The Full Text for all R-Phrases and Hazard Statements is Displayed in Section 16

**4 FIRST-AID MEASURES**

**GENERAL INFORMATION**

Contact physician if discomfort continues.

**INHALATION**

Move the exposed person to fresh air at once.  
 If respiratory problems, artificial respiration/oxygen.

**INGESTION**

Get medical attention immediately!  
 Immediately rinse mouth and provide fresh air.

## Base Oil Ultra-S 4 (100 Neutral)

### SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water.

Get medical attention promptly if symptoms occur after washing.

### EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention.

## 5 FIRE-FIGHTING MEASURES

### EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide or dry powder.

### SPECIAL FIRE FIGHTING PROCEDURES

NOTE! Use air-supplied respirators to protect against gases/fumes. Use water SPRAY only to cool containers! Do not put water on leaked material.

### UNUSUAL FIRE & EXPLOSION HAZARDS

N/A.

### SPECIFIC HAZARDS

When heated and in case of fire, corrosive vapours/gases may be formed.

### PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6 ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet.

### ENVIRONMENTAL PRECAUTIONS

Do not allow ANY environmental contamination. Do not discharge into drains, water courses or onto the ground.

### SPILL CLEAN UP METHODS

Collect with absorbent, non-combustible material into suitable containers. Transfer to a container for disposal.

## 7 HANDLING AND STORAGE

### USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Wear full protective clothing for prolonged exposure and/or high concentrations. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

### STORAGE PRECAUTIONS

Keep upright. Keep away from food, drink and animal feeding stuffs. Store in tightly closed original container in a dry, cool and well-ventilated place.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### PROTECTIVE EQUIPMENT



### PROCESS CONDITIONS

Provide eyewash station.

### ENGINEERING MEASURES

Provide sufficient ventilation during operations which cause vapour formation.

### RESPIRATORY EQUIPMENT

In case of inadequate ventilation use suitable respirator. Wear mask supplied with: Gas cartridge suitable for organic substances.

### HAND PROTECTION

Chemical resistant gloves required for prolonged or repeated contact.

### EYE PROTECTION

Wear approved safety goggles.

### OTHER PROTECTION

Provide eyewash station.

### HYGIENE MEASURES

Wash hands after contact. Promptly remove any clothing that becomes contaminated. DO NOT SMOKE IN WORK AREA!

## 9 PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Viscous liquid

### COLOUR

Clear

**Base Oil Ultra -S4 (100 Neutral)**

<b>BOILING POINT (°C)</b>	N.A.
<b>RELATIVE DENSITY</b>	0.834 @ 15 °C
<b>VAPOUR PRESSURE</b>	N.A.
<b>VISCOSITY</b>	4.0-4.5 cSt @ 100°C (ASTM D 445) 18.0-20.0 cSt @ 40°C (ASTM D 445)
<b>FLASH POINT (°C)</b>	≥ 210°C (ASTM D 92)
<b>FLAMMABILITY LIMIT - LOWER(%)</b>	0.9%
<b>FLAMMABILITY LIMIT - UPPER(%)</b>	7%

**10 STABILITY AND REACTIVITY****STABILITY**

Stable under normal temperature conditions and recommended use.

**HAZARDOUS POLYMERISATION**

Will not polymerise.

**MATERIALS TO AVOID**

Strong oxidising substances.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Aldehydes. Ketones Nitrous gases (NO<sub>x</sub>). Sulphurous gases (SO<sub>x</sub>).

**11 TOXICOLOGICAL INFORMATION**

<b>TOXIC DOSE 1 - LD 50</b>	>5000 mg/kg (oral rat)
<b>TOXIC DOSE 2 - LD 50</b>	>5000 mg/kg (dermal/rabbit)

**INHALATION**

Not relevant at normal room temperatures. When heated, irritating vapours may be formed.

**INGESTION**

Harmful if swallowed.

**SKIN CONTACT**

No specific health warnings noted.

**EYE CONTACT**

No specific health warnings noted.

**HEALTH WARNINGS**

Observe good chemical hygiene practices.

**ROUTE OF ENTRY**

Ingestion. Skin and/or eye contact.

**MEDICAL SYMPTOMS**

Diarrhoea. Nausea, vomiting.

**12 ECOLOGICAL INFORMATION**

<b>LC 50, 96 Hrs, FISH mg/l</b>	>1000
<b>EC 50, 48 Hrs, DAPHNIA, mg/l</b>	>1000
<b>IC 50, 72 Hrs, ALGAE, mg/l</b>	>1000

**MOBILITY**

The product is insoluble in water and will spread on the water surface.

**BIOACCUMULATION**

Will not bio-accumulate.

**DEGRADABILITY**

The product is not readily biodegradable.

**ACUTE FISH TOXICITY**

Not considered toxic to fish.

**13 DISPOSAL CONSIDERATIONS****GENERAL INFORMATION**

Dispose of waste and residues in accordance with local authority requirements.

**DISPOSAL METHODS**

Incinerate with provision for removal of effluent gases by scrubber.

**14 TRANSPORT INFORMATION****GENERAL**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

**Base Oil Ultra -S4 (100 Neutral)****15 REGULATORY INFORMATION**

EINECS No. : 265-158-7

**CLASSIFICATION IN ACCORDANCE WITH EC 1272/2008**

Classification (EC 1272/2008)

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**16 OTHER INFORMATION****ISSUED BY**

S-OIL

**REVISION DATE** 18.04.2011**REV. NO./REPL. SDS GENERATED** Rev. 2**SAFETY DATA SHEET STATUS**

Temporarily approved for use for 3 months.

**DATE** 18.04.2011**RISK PHRASES IN FULL**

R65 Harmful: may cause lung damage if swallowed.

**HAZARD STATEMENTS IN FULL**

H304 May be fatal if swallowed and enters airways.

**DISCLAIMER**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.