«Sector»

Safety Data Sheet

Issued: May 25, 1999

SDS No. SN01M047

SHELL RIMULA ULTRA

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product name: SHELL RIMULA ULTRA

Product type: High-speed diesel engine oil

Supplier: «Supplier»

Address: «Add1»
«Add2»

Contact numbers:

Telephone: «ContactNo»
Telex: «ContactTlx»
Fax: «ContactFax»

Emergency telephone number:

«EmergencyCover» «ENT24Hour»

2. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation description: Blend of severely hydrotreated slack wax, synthetic esters, polyolefins and additives.

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. Used oil may contain harmful impurities.

Safety hazards: Not classified as flammable, but will burn. Contains mineral oil for which an exposure limit for oil mist applies.

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: In the unlikely event of dizziness or nausea, remove casualty to fresh air. If symptoms persist, obtain medical attention.

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 FIGHTING MEASURES

Specific hazards: Combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, 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 spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. Inform local authorities if this cannot be prevented.

Clean-up methods - small spillage: Absorb liquid with sand or earth. Sweep up and remove to a suitable, clearly marked container for disposal in accordance with local regulations.

Clean-up methods - large spillage: Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Dispose of 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: For containers or container linings, use: Mild steel. high density polyethylene.

Unsuitable materials: For containers or container linings, avoid: PVC.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering control measures: Use local exhaust ventilation if there is a risk of inhalation of vapours, mists or aerosols.

Occupational exposure standards: Threshold limit values are given below. Lower exposure limits may apply locally:

Component name	Limit type	Value	Unit	Other information
Oil mist, mineral	8-hour TWA	5	mg/m3	ACGIH
	15-min STEL	10	mg/m3	ACGIH

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

Respiratory protection: Not normally required. If oil mist cannot be controlled, a respirator fitted with an organic vapour cartridge combined with a particulate pre-filter should be used.

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: Liquid at ambient temperature.

Colour: Amber

Odour: Characteristic mineral oil

Initial boiling point: Expected to be above 280°C

Vapour pressure: Expected to be less than 0.5 Pa at 20°C

Density: See Table 1

Kinematic viscosity: See Table 1

Vapour density (air = 1):	Greater than 1
Pour point:	See Table 1
Flash point:	See Table 1
Flammability limit - lower:	1% v/v
Flammability limit - upper:	10% v/v
Auto-ignition temperature:	Expected to be above 320°C
Solubility in water:	Negligible
n-octanol/water partition coefficient:	Log P_{ow} expected to be greater than 6

10. STABILITY/REACTIVITY

Stability:	Stable
Conditions to avoid:	Extremes of temperature and 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.
Acute toxicity - inhalation:	Not considered to be an inhalation hazard under normal conditions of use.
Eye irritation:	Expected to be slightly irritant.
Skin irritation:	Expected to be slightly irritant.
Respiratory irritation:	If mists 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-carcinogenic in animal skin-painting studies. Other components are not known to be associated with carcinogenic effects.
Mutagenicity:	Not expected to be a mutagen.

Other information:

Prolonged and/or repeated contact with this product 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.

Used engine oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.

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:

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Persistence/degradability:

Not readily biodegradable.

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).

Sewage treatment:

13. DISPOSAL CONSIDERATIONS

Waste disposal:

Used or waste oil should be recycled or disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the contractor to deal satisfactorily with used oil should be established beforehand. Used or waste oil should not be allowed to contaminate soil or water.

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 in compliance

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: Lubricant for high-speed diesel engines.

Technical contact point: «TechPoint»

Technical contact number:

Telephone: «TechNo»
Telex: «TechTlx»
Fax: «TechFax»

SDS history: Edition No.: 2

First Issue: January 14, 1998

Revised: May 25, 1999

Revisions highlighted: Typical physical properties amended in Table1 and Section 9. Section 12 amended.

TABLE 1: SHELL RIMULA ULTRA: Physical properties

SAE GRADE	5W/30	10W/40
K.Viscosity at 40°C, mm^2/s	69	83
Density at 15°C,kg/m^3	866	866
Pour Point, °C	-35	-33
Flash Point, °C (COC)	210	216

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.