

Safety Data Sheet

Shell Dromus Oil BL

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

Product Code 001A9424
Infosafe No. ACLPC 01/eng/C
Issued Date 2005/07/27
Product Type/Use Metalworking oil concentrate.

Other Names

Name	Code
Shell Dromus Oil BL	140000005450

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 UNITED ARAB EMIRATES

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation Description

Highly refined mineral oils and additives. The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

Name	CAS	EINECS	Proportion	Hazard	R Phrase
Tall oil acids and naphthenic acids, potassium salts	61790-44-1 & 66072-08-0	-	5-10 %	Xi	R36
Sodium dimethylbenzene alkylsulphonates	92332-16-6	296-142-8	1-5 %	Xi	R36/38
2-methylpentan-2,4-diol	107-41-5	203-489-0	1-3 %	Xi	R36/38
2,2'2'-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	225-208-0	1-3 %	Xi, Xn	R43, R22
N,N-Bis(2-hydroxyethyl)oleamide	93-83-4	202-281-7	1-3 %	Xi	R36/38

Other Information

See Section 16 'Other Information' for full text of each relevant Risk Phrase.

3. HAZARDS IDENTIFICATION

EC Classification	Sensitising.
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Human Health Hazards

May cause sensitization by skin contact. Prolonged or repeated exposure may give rise to dermatitis. Used oil may contain harmful impurities.



Safety Hazards

Not classified as flammable, but will burn.

Environmental Hazards

Not classified as dangerous for the environment.

4. FIRST AID MEASURES

Symptoms and Effects

May cause an allergic skin reaction in sensitive individuals.

Inhalation

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

Skin

Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.

Eye

Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Ingestion

Wash out mouth with water and obtain medical attention. Do not induce vomiting.

Advice to Doctor

Treat symptomatically. Aspiration into the lungs may cause chemical pneumonitis. Dermatitis may result from prolonged or repeated exposure. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function.

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 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 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. Wear PVC, Neoprene or nitrile rubber gloves. Wear rubber knee length safety boots and PVC Jacket and Trousers. Wear safety glasses or full face shield if splashes are likely to occur.

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 Spillages

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 Spillages

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**

Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Avoid prolonged or repeated contact with skin. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages. Cloth, paper and other materials that are used to absorb spills present a fire hazard. Avoid their accumulation by disposing of them safely and immediately. In addition to any specific recommendations given for controls of risks to health, safety and the environment, an assessment of risks must be made to help determine controls appropriate to local circumstances.

Storage

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

Storage Temperatures

0°C Minimum. 50°C Maximum.

Recommended Materials

For containers or container linings, use mild steel or 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**Exposure Limits**

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
2-methylpentan-2,4-diol	ACGIH	PEL	25	ppm	
Oil mist, mineral	ACGIH	TWA	5	mg/m ³	
	ACGIH	STEL	10	mg/m ³	

ACGIH

ACGIH Threshold Limit Values.

Exposure Controls

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

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. Overalls and shoes with oil resistant soles should be worn. Launder overalls and undergarments regularly.

Environmental Exposure Controls

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour	Amber.
Physical State	Liquid at ambient temperature.
Odour	Characteristic mineral oil.
pH Value	Not applicable.
Vapour Pressure	Expected to be less than 0.5 Pa at 20°C.
Initial Boiling Point	Expected to be above 280°C.
Solubility in Water	Miscible. Forms an emulsion.
Density	889 kg/m ³ at 15°C.
Flash Point	>180°C (PMCC) (based on mineral oil).
Flammable Limits - Upper	10% V/V (typical) (based on mineral oil).
Flammable Limits - Lower	1% V/V (typical) (based on mineral oil).
Auto-Ignition Temperature	Expected to be above 320°C.
Kinematic Viscosity	37 mm ² /s at 40°C.
Evaporation Rate	Data not available.
Vapour Density (Air=1)	Greater than 1.
Partition co-efficient, n-octanol/water	Log Pow expected to be greater than 6.
Pour Point	Data not available.

10. STABILITY AND 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 > 2000 mg/kg.

Acute Toxicity - Dermal

LD50 expected to be > 2000 mg/kg.



Acute Toxicity - Inhalation

Not considered to be an inhalation hazard under normal conditions of use.

Eye Irritation

Expected to be slightly irritating.

Skin Irritation

Expected to be slightly irritating.

Respiratory Irritation

If mists are inhaled, slight irritation of the respiratory tract may occur.

Skin Sensitisation

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 considered to be a mutagenic hazard.

Reproductive Toxicity

Not considered to be toxic to reproduction.

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. High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed. Used 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. Emulsifies with water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Persistence / Degradability

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

Bioaccumulation

Contains components with the potential to bioaccumulate.

Ecotoxicity

May cause physical fouling of aquatic organisms. Product is expected to be practically non-toxic to aquatic organisms, LL/EL50 >100 mg/l. (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

Other Adverse Effects

Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.



Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities.

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Recycle or dispose of in accordance with prevailing regulations, by a recognised collector or contractor. The competence of the contractor to deal satisfactorily with this type of product should be established beforehand. Do not pollute the soil, water or environment with the waste product.

Product Disposal

As for waste disposal.

Container Disposal

Recycle or dispose of in accordance with the legislation in force with a recognised collector or contractor.

14. TRANSPORT INFORMATION

Transport Information

Not dangerous for transport under UN, IMO, and IATA/ICAO codes.

15. REGULATORY INFORMATION

EC Symbols	Xi
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Indication of danger

Irritant.

EC Risk Phrase	R43 May cause sensitization by skin contact.
EC Safety Phrase	S24 Avoid contact with skin. S37 Wear suitable gloves.
EINECS	All components listed.
TSCA (USA)	Not established.

Packaging & Labelling

Contains 2,2,2, - (hexahydro-1,3,5-triazine-1,3,5 -triy) triethanol.
Safety data sheet available for professional user on request.

16. OTHER INFORMATION

References

67/548/EEC - Dangerous Substances Directive.
1999/45/EC - Dangerous Preparations Directive.
91/155/EEC - Safety Data Sheet Directive.
Concawe Report 01/53 - Classification and labelling of petroleum substances according to the EU dangerous substances directive.
Concawe Report 01/54 - Environmental Classification of Petroleum Substances - Summary Data and Rationale
Concawe Report 05/87 - Health aspects of lubricants.

Restrictions

This product must not be used in applications other than recommended without first seeking the advice of the SHELL technical department.

List of R Phrases in Section 2

R22 Harmful if swallowed.

R36 Irritating to eyes.

R43 May cause sensitization by skin contact.

R36/38 Irritating to eyes and skin.

Further Information

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 does not constitute a guarantee for any specific property of the product.

... **End Of SDS** ...

