

Safety Data Sheet

Shell Helix Brake and Clutch Fluid

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

Product Code	001B1642	Telephone Numbers	
Infosafe No.	ACNGZ AU/eng/C	Emergency Tel.	1800 651 818
Issued Date	28/06/2006	Telephone/Fax Number	Tel: 03 9666 5444 Fax: 03 8823 4800
Product Type/Use	Brake fluid.		
Supplier			
Shell Company of Australia Ltd. Level 2, 8 Redfern Road, Hawthorn East, Victoria 3123 (ABN 46 004 610 459) AUSTRALIA			

2. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation Description

Contains glycol ether borate ester plus corrosion inhibitors and antioxidant.

3. HAZARDS IDENTIFICATION

Hazards Identification

NON-HAZARDOUS SUBSTANCE.

NON-DANGEROUS GOODS.

Hazard classification according to the criteria of NOHSC.

Dangerous goods classification according to the Australia Dangerous Goods Code.

Human Health Hazards

No specific hazards under normal use conditions. Prolonged or repeated exposure to skin may give rise to dermatitis.

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

Ingestion may cause dizziness, headache, nausea, vomiting and, in extreme cases, unconsciousness and even death. Symptoms of poisoning may occur even after several hours, therefore medical observation for at least 48 hours after the accident is required.



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. Absorption through the skin may occur on prolonged or repeated exposure. Ingestion may cause systemic effects at high dosage. Administer 50ml of pure ethanol in a drinkable concentration. Severe exposure may cause kidney and liver damage.

5. FIRE FIGHTING MEASURES

Specific Hazards

Not classified as flammable, but will burn. 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 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.

Other Information

Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Avoid contact with skin and eyes. Do not breathe mists, aerosols. 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 contact with skin, eyes and respiratory system. 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. Prevent all contact with water and with moist atmosphere.

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

No Exposure Limit Established

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 or as dyed.
Physical State	Liquid at ambient temperature.
Odour	Ethereal.
pH Value	7.5.
Vapour Pressure	Expected to be less than 0.5 Pa at 20°C.
Boiling Point	283 - 286°C.



Solubility in Water	Miscible.
Flash Point	circa 155 °C.
Flammable Limits - Upper	Data not available.
Flammable Limits - Lower	Data not available.
Auto-Ignition Temperature	Data not available.
Kinematic Viscosity	circa 5 mm ² /s at 20°C.
Evaporation Rate	Data not available.
Vapour Density (Air=1)	Greater than 1.
Partition co-efficient, n-octanol/water	Not applicable.

10. STABILITY AND REACTIVITY

Stability

Stable. Hygroscopic.

Conditions to Avoid

Exposure to water vapour.

Materials to Avoid

Strong oxidizing agents. Mineral oils and water.

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

Not expected to be a skin sensitizer.

Carcinogenicity

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.

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. Dissolves in water. If the product enters soil, one or more constituents will be mobile and may contaminate groundwater.

Persistence / Degradability

Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

Bioaccumulation

Not expected to bioaccumulate significantly.

Ecotoxicity

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).

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 ADG, IMO and IATA/ICAO regulations.

ADG UN Class

None Allocated

ADG Packing Group

None Allocated

ADG Hazchem Code

None Allocated

IMDG Hazard Class

None Allocated

IMDG Packing Group

None Allocated



15. REGULATORY INFORMATION

EC Symbols	Not classified.
EC Risk Phrase	Not classified.
EC Safety Phrase	S2 Keep out of reach of children. S24 Avoid contact with skin. S46 If swallowed, seek medical advice immediately and show this container or label.
EINECS	Not all components listed.

AICS (Australia)

All components listed.

National Legislation

National Code of Practice for the Preparation of Material Safety Data Sheets [NOHSC:2011]

List of Designated Hazardous Substances [NOHSC:10005].

Approved Criteria for Classifying Hazardous Substances [NOHSC:1008].

Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

Australian Dangerous Goods Code.

Standard Uniform Scheduling of Drugs and Poisons.

Packaging & Labelling

Safety data sheet available for professional user on request.

16. OTHER INFORMATION

References

For detailed advice on Personal Protective equipment, refer to the following Australian Standards :-

HB 9 (Handbook 9) Manual of industrial personal protection.

AS/NZS 1337 Eye protectors for industrial applications.

AS/NZS 1715 Selection, use and maintenance of respiratory protective devices.

AS/NZS 1716 Respiratory protective devices.

Poisons Schedule

NS.

Restrictions

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

Technical Contact Numbers

(03) 9666 5444.

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 ...

