



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	SHELL BRAKE AND CLUTCH FLUID DOT3
Other Names	None
Manufacturer's Product Code	24301
Recommended Use	Hydraulic fluid for use in automotive brake and clutch systems

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au



Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Non-dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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Hazardous chemical classification	Pictogram	Hazard statement
Eye Damage/Irritation, Category 1	 CORROSION	H318 Causes serious eye damage
Reproductive Toxicity, Category 2	 HEALTH HAZARD	H361 Suspected of damaging fertility or the unborn child

Product: SHELL BRAKE AND CLUTCH FLUID DOT3**Precautionary statements:**

<i>GENERAL</i>	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
<i>PREVENTATIVE</i>	
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P280	Wear eye protection/face protection
P281	Use personal protective equipment as required
<i>RESPONSE</i>	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention
P310	Immediately call a POISON CENTER or doctor/physician
<i>STORAGE</i>	
P405	Store locked up
<i>DISPOSAL</i>	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Butyl Triglycol	143-22-6	20 – 45
Diethylene Glycol	111-46-6	10 – 25
Methyl Diglycol	111-77-3	0 – 3
Butyl Diglycol	112-34-5	0 – 3

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment
Skin Contact:	If skin contact occurs, wash skin thoroughly with water and follow by washing with soap if available. If any irritation persists, seek medical attention
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists seek medical attention
Ingestion:	If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical attention

Symptoms caused by exposure

Inhalation:	May result in burning sensation of the nose and throat
Skin:	May include skin burns, redness, swelling and/or blisters.
Eye:	May cause serious eye irritation. May include burning sensation, redness, swelling, blurred vision.
Ingestion:	May result in nausea vomiting and stomach pain

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Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Not considered to be a significant fire risk. In the event of fire use foam, dry powder, carbon dioxide or water spray/fog. Do not use water in a jet.

Specific hazards arising from the chemical

Combustion products may contain harmful or irritating fumes.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Ventilate contaminated area thoroughly.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterways using sand, earth or other appropriate barriers.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), dilute with water and mop up, or absorb with dry inert material, and place in an appropriate labelled, sealable container for product recovery or safe disposal.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Retain as contaminated waste.

Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing vapours. Do NOT ingest. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area, away from sunlight, ignition sources and other sources of heat. Avoid contamination with other substances and in particular with mineral oils.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia –
Diethylene Glycol: 100mg/m³ (23ppm) TWA (8hr)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Product: SHELL BRAKE AND CLUTCH FLUID DOT3**Individual protection measures**

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid, colourless to amber
Odour:	Bland
Odour threshold (ppm):	Data not available
pH:	7.0 – 10.0
Melting point/freezing point (°C):	< -50
Initial boiling point and boiling range (°C):	> 205
Flash point (°C):	> 93
Evaporation rate (Butyl acetate = 1):	Negligible
Flammability:	Data not available
Upper/lower flammability or explosive limits (%):	Data not available
Vapour pressure (mbar @ 20°C):	< 2
Vapour density (air = 1):	Data not available
Density (g/ml @ 15°C):	1.01 – 1.06
Solubility:	Miscible with water and ethanol
Partition coefficient: n-octanol/water:	< 2.0
Auto-ignition temperature (°C):	> 300
Decomposition temperature (°C):	> 300
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Glycol ethers can form peroxides on storage. Glycol ethers can react with light metals with the evolution of hydrogen.

Product: SHELL BRAKE AND CLUTCH FLUID DOT3

Conditions to avoid

Do not distil to dryness without testing for peroxide formation.

Incompatible materials

Strong oxidising agents. Brake fluid should never be contaminated with any other substance.

Hazardous decomposition products

None known.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Expected to be of low toxicity, LD50 (oral), Rat \geq 5000mg/kg. If a significant amount of this product is ingested there is a risk of renal damage which in extreme cases could lead to kidney failure, coma or death. Other symptoms may include abdominal discomfort, metabolic acidosis, headache and nausea
Skin corrosion/irritation:	May be irritating. Prolonged contact may cause dermatitis
Serious eye damage/irritation:	Serious irritant. Treat promptly
Respiratory or skin sensitisation:	Data not available
Germ cell mutagenicity:	Data not available
Carcinogenicity:	Data not available
Reproductive toxicity:	Methyl Diglycol is classified as a reproductive toxicant
Specific Target Organ Toxicity (STOT) – single exposure:	Data not available
Specific Target Organ Toxicity (STOT) – repeated exposure:	Data not available
Aspiration hazard:	No aspiration hazard expected

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Expected to be of low toxicity: LC/EC/IC50 \geq 100mg/l
Aquatic invertebrate –	Expected to be virtually non-toxic
Algae –	Expected to be virtually non-toxic
Microorganisms –	Expected to be virtually non-toxic

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Readily biodegradable.

Product: SHELL BRAKE AND CLUTCH FLUID DOT3

Bioaccumulative potential

Not expected to bioaccumulate.

Mobility in soil

Soluble in water. Volatilisation from water to air not expected. Mobile in soil until degraded.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	Not applicable
Proper shipping name:	Not applicable
Australian Dangerous Goods class:	Not applicable
Australian Dangerous Goods packing group:	Not applicable
Hazchem code:	Not applicable

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	Not scheduled
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	Not applicable

SECTION 16 OTHER INFORMATION

Date of preparation:	22/05/2019
Revision number:	1
Changes in this revision:	New document

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.
