

**MATERIAL SAFETY DATA SHEET** 

Page 1 of 8 Issue Date: 17 July 2014 Dot 4 Brake Fluid Version: 4

#### Product name: Brake Fluid Dot 4

#### **1. COMPANY DETAILS AND PRODUCT IDENTIFICATION**

1300 796 009 (02) 9604 1611

1300 796 009

HI8-3140-

Brake Fluid

Brake Fluid Dot 4

Dot 4 Bake Fluid

COMPANY: ADDRESS:

Hi-Tec Oil Traders Pty Ltd. (ABN 28 053 837 362) PO Box 322 Castle Hill NSW 1765 5 Tarlington Place, Smithfield NSW 2164

Refer to Product Information Sheet for additional information.

Visit our website: <u>www.hi-tecoils.com.au</u> Email: hitecoils@hi-tecoils.com.au

TELEPHONE NUMBER: FAX NUMBER: EMERGENCY TELEPHONE NUMBER:

PRODUCT NAME: OTHER NAMES:

MANUFACTURER'S PRODUCT CODE:

USE:

ADDITIONAL INFORMATION:

OTHER INFORMATION:

#### 2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION:	NON-HAZARDOUS SUBSTANCE NON-DANGEROUS GOODS Hazard classification according to criteria of NOHSC. Dangerous goods classification according to Australian Dangerous Goods Code.
RISK PHRASE(S):	
SAFETY PHRASE(S):	<ul> <li>S2 Keep out of reach of children.</li> <li>S24 Avoid contact with skin.</li> <li>S39 Wear eye/ face protection.</li> <li>S26 In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.</li> </ul>
IRRITANCY OF PRODUCT:	Not classified as an irritant.
SENSITISATION OF PRODUCT:	Not known to be a sensitiser.
TERATOGENICITY:	No teratogenic effects known.
OTHER INFORMATION:	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 environment on disposal. All used oils should be handled with caution and



AUSTRALIAN FAMILY OWNED SINCE 1989

skin contact avoided as far as possible.





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#### **3. IDENTIFICATION / COMPOSITION OF INGREDIENTS**

#### CHEMICAL CHARACTERISTICS:

Liquid

INGREDIENTS:-

CHEMICAL ENTITY: Polyglycol ethers Glycol ether ester Polyglycols Corrosion inhibitor Ingredients determined not to be hazardous

OTHER INFORMATION:

CAS No. Confidential Confidential Confidential Confidential Mixture PROPORTION 50-60 % 20-35 % 10-25 % 0-0.5 % To 100%

The petroleum oils in this product contain less than 3% DMSO extract as measured by IP 346 test method.

#### 4. FIRST AID MEASURES

#### HEALTH EFFECTS

SWALLOWED:	If a quantity is ingested seek immediate medical attention. Rinse mouth immediately then give water to drink. DO NOT induce vomiting. If vomiting occurs get immediate medical attention due to aspiration into lungs risk.
EYE:	Immediately irrigate with copious amounts of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
SKIN:	Remove contaminated clothing and wash skin thoroughly with plenty of soap and water. High pressure injection through the skin requires <b>URGENT</b> medical attention for possible incision, irrigation and/or debridement. Contact with molten material will require treatment by a physician for burns (Do not remove material).
INHALED:	Remove victim from exposure to fresh air – avoid becoming a casualty. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through face mask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage and seek urgent medical aid.
FIRST AID FACILITIES:	Normal washroom facilities are generally suitable. Ensure an eye wash station and safety shower is available and ready for use.
ADVICE TO DOCTOR:	Treat symptomatically.
OTHER INFORMATION:	Keep water and mild soap near work site.







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#### **5. FIRE FIGHTING MEASURES**

#### FIRE/EXPLOSION HAZARD

HAZARDS OF USE/STORAGE:	Product is a combustible liquid according to AS 1940. This product is combustible if preheated.
HAZARDS FROM COMBUSTION PRODUCTS:	Combustion products may include: carbon oxides, toxic vapours/gases, a complex mixture of airborne unidentified organic and inorganic solid and liquid particulates.
FIRE-FIGHTING RECOMMENDATIONS:	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit. Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
PRECAUTION:	Water may cause splattering.
SUITABLE EXTINGUISHING MEDIA:	Extinguish with foam, carbon dioxide, dry powder, BCF or water fog. Do not use water jet as an extinguisher, as this will spread the fire. Containers close to fire should be removed or cooled with water.
PROTECTIVE MEASURES:	Fire fighters should wear positive pressure self-contained breathing apparatus if risk of exposure to products of combustion.
REACTIVITY:	May react with strong oxidising agents.

#### 6. ACCIDENTAL RELEASE MEASURES

SPILLS & DISPOSAL:

Slippery when spilt. Avoid accidents, clean up immediately.

CLEAN-UP PROCEDURE - SMALL SPILLS (20L or less): Absorb or contain liquid with sand, earth or spill control material. Avoid using sawdust or cellulose. Shovel up using non-sparking tools and place in a sound labelled sealable container for subsequent safe disposal. Place leaking containers in a sound labelled drum. Scrub contaminated surfaces with detergent solution. Retain washings as contaminated waste.

CLEAN-UP PROCEDURES - LARGE SPILLS (Greater than 20L): Transfer to a sound labelled, sealable container for product recovery or safe disposal. Treat residues as for small spills.

PERSONAL PRECAUTIONS: Extinguish naked flames. Remove ignition sources. No smoking. Avoid sparks. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Evacuate the area of non-essential personnel. Shut off leaks, if possible without personal risk. Do not breathe vapours. Ventilate contaminated area thoroughly. Dispose of according to local regulations.







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### 6. ACCIDENTAL RELEASE MEASURES (CONT.)

OTHER INFORMATION:

PROCEDURES IN CASES OF LEAKAGE OR BREAKAGE: Stop the source of the leak or release and contain spill if possible. Ventilate area. Use respirator and protective clothing outlined in this MSDS. Cover spill with inert absorbent earth. Use a stiff brush to mix thoroughly. Sweep up and place in a sound labelled disposable container. Scrub contaminated area with detergent and water using a stiff brush. Pick up liquid with additional absorbent material and place in a sound labelled disposable container. Prevent contamination of groundwater or surface water.

### 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:	When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages. Ensure the appropriate personal protective equipment is used when handling this product. Ensure high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking smoking or using the toilet.
SAFE STORAGE CONDITIONS:	Keep containers closed at all times. Store in a cool place out of direct sunlight. Store away from oxidising agents. Check containers regularly for leaks.
CORROSIVENESS:	Not corrosive.
STORAGE REGULATIONS:	Store in a well ventilated place away from ignition sources, oxidising agents, foodstuffs and clothing. Keep containers closed when not in use. Store in original packaging as approved by manufacturer.
	Refer to AS 1940 – The Storage and Handling of Flammable Liquids, and NOHSC: 1015 – National Standard for Storage and Handling of Workplace Dangerous Goods for further information.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS: No exposure standard has been established for this product. NOHSC Exposure Standard: Oil mists – time weighted average (TWA) 5 mg/m<sup>3</sup> is recommended.
 OTHER EXPOSURE INFORMATION: Exposure Standard means the average concentration of a particular substance in the worker's breathing zone, exposure to which, according to current knowledge, should not cause adverse health effects nor cause undue discomfort to nearly all workers. It can be of three forms; time-weighted average (TWA), peak limitation, or short term exposure limit (STEL).
 ENGINEERING CONTROLS: Maintain concentration below recommended exposure limit. Special ventilation is not normally required. However, in the operation of certain equipment or at elevated temperatures mists or vapour may be generated and localised exhaust ventilation should be provided to maintain airborne concentration levels below the exposure standard or the Manufacturer's

recommended exposure standard.







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#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT.)

RESPIRATORY PROTECTION:	A respirator is not normally required. Airborne concentrations should be kept at lowest level possible. If vapours, mists or dusts are generated and the recommended exposure limit for the product is exceeded, use appropriate AS/NZS 1715/1716 approved half –face filter respirator suitable for organic vapours (Type A1) or air supplied respirator are worn. Air supplied respirators should always be worn when the airborne concentration of the contaminant or the oxygen content of the air is unknown
EYE PROTECTION:	Safety glasses, goggles or face shield as appropriate.
HAND PROTECTION:	Rubber or PVC gloves.
FOOTWEAR:	Enclosed footwear.
BODY PROTECTION:	Overalls or similar protective apparel.
HYGIENE MEASURES:	Always wash hands before eating, drinking, smoking or using the toilet. If contamination occurs, change clothing. Launder contaminated clothing before reuse. Discard internally contaminated gloves.
SPECIAL PROTECTIVE MEASURES:	The product will not burn unless preheated. Isolate from sources of heat, naked flames or sparks.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM:	Liquid
APPEARANCE:	Clear and bright liquid.
COLOUR:	Light blue
ODOUR:	No data
MELTING POINT:	No data
BOILING POINT:	Greater than 260°C
DENSITY @ 15°C (kg/L):	1.05 – 1.07
FLASHPOINT (ASTM D-93), Closed Cup:	140°C
FLAMMABILITY LIMITS -LOWER:	No data
FLAMMABILITY LIMITS -UPPER:	No data
FLAMMABILITY:	Combustible Liquid according to AS 1940.







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### 9. PHYSICAL AND CHEMICAL PROPERTIES (CONT)

SOLUBILITY IN WATER:	Miscible.
OCTANOL/WATER PARTITION COEFF:	No data
SOLUBILITY IN ORGANIC SOLVENTS:	No data.
VAPOUR PRESSURE @20°C	<0.05 mm Hg.
VAPOUR DENSITY (Air = 1):	No data
VISCOSITY @ 40 °C (mm <sup>2</sup> /s):	Approximately 1
EVAPORATION RATE:	Negligible
AUTO-IGNITION TEMPERATURE:	Greater than 300°C
EXPLOSION PROPERTIES:	Not considered an explosion risk under normal conditions of use.
OTHER INFORMATION:	These physical data and other properties do not constitute a specification.

#### **10. STABILITY AND REACTIVITY**

CHEMICAL STABILITY:	Stable under normal conditions of use.
CONDITIONS TO AVOID:	Heat, direct sunlight, open flames or other sources of ignition.
INCOMPATIBLE MATERIALS:	Strong oxidising agents.
HAZARDOUS REACTIONS:	Will react with strong oxidising agents.
HAZARDOUS POLYMERISTION:	Will not occur.

#### **11. TOXICOLOGICAL INFORMATION**

TOXICOLOGY INFORMATION:	This product may contain petroleum base oils, which may be refined by various processes including severe solvent extraction, hydro cracking and hydro treating. These oils have not been listed in the U.S. National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic or probably carcinogenic to humans. Oral LD50 ({UDO1}):{ UDO2} mg/kg.
INHALATION:	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.





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### **11. TOXICOLOGICAL INFORMATION (CONT.)**

INGESTION:	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.
SKIN:	There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
EYE:	There is some evidence to suggest that this material can cause eye irritation and damage in some persons. The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
REPRODUCTIVE TOXICITY:	Product is not a known to have damaging reproductive effects.
CHRONIC EFFECTS:	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.
MUTAGENICITY:	Mutagenic effects not known.
CARCINOGENICITY:	Product is not a known carcinogen.

#### **12. ECOLOGICAL INFORMATION**

ECOTOXICITY: The product is not expected to be hazardous to the environment. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

MOBILITY: The product is soluble in water.

ENVIRONMENTAL FATE (EXPOSURE): Avoid contaminating waterways, drains and sewers.

#### **13. DISPOSAL CONSIDERATIONS**

DISPOSAL CONSIDERATIONS: Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.

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#### **14. TRANSPORT INFORMATION**

TRANSPORT INFORMATION:

Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Label: Combustible Liquid, regulated under AS1940 for Bulk Storage purposes only.

#### **15. REGULATORY INFORMATION**

POISON SCHEDULE:Not scheduled.PACKING & LABELLING:Combustible Liquid, regulated under AS1940 for Bulk Storage purposes only.AUSTRALIAN INVENTORY STATUS:All components are listed or exempted.

#### **16. OTHER INFORMATION**

CONTACT PERSON/POINT:	General Manager 1300 796 009 This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions. If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken. Material Safety Data Sheets are updated frequently. Please ensure you have a current copy.
LITERATURE REFERENCES:	<ul> <li>* NOHSC: 2011 National Code of Practice for the preparation of Material Safety Data Sheets.</li> <li>* NOHSC: 1008 Approved Criteria for Classifying Hazardous Substances.</li> <li>* NOHSC: 10005 List of Designated Hazardous Substances.</li> <li>* NOHSC: 1005 Control of Workplace Hazardous Substances, National Code of Practice.</li> <li>* NOHSC: 2007 Control of Workplace Hazardous Substances, National Code of Practice.</li> <li>* NOHSC: 1003 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, National Exposure Standards.</li> <li>* NOHSC: 3008 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, Guidance Note.</li> <li>* NOHSC: 1015 Storage and Handling of Workplace Dangerous Goods, National Standard.</li> <li>* NOHSC: 2017 Storage and Handling of Drugs and Poisons</li> <li>* ADG: Australian Dangerous Goods Code</li> <li>* MSDS of component materials.</li> </ul>
LAST CHANGE:	Supersedes document issued: March 2012 Reason/s for revision: Colour change
GH417071/12	

END OF MSDS

