Hi-Tec Oil Traders Pty Ltd ABN 28 053 837 362
5 Tarlington Place Smithfield NSW 2164
Correspondence: P.O Box 322 Castle Hill NSW 1765
Ph: 1300 796 009 | **Fax:** (02) 9604 1611 | **Email:** hitecoils@hi-tecoils.com.au
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SAFETY DATA SHEET

Product name: **Brake Fluid Dot 5**

1. COMPANY DETAILS AND PRODUCT IDENTIFICATION

COMPANY:	Hi-Tec Oil Traders Pty Ltd. (ABN 28 053 837 362)
ADDRESS:	PO Box 322 Castle Hill NSW 1765 5 Tarlington Place, Smithfield NSW 2164
TELEPHONE NUMBER:	1300 796 009
FAX NUMBER:	(02) 9604 1611
EMERGENCY TELEPHONE NUMBER:	1300 796 009
PRODUCT NAME:	Brake Fluid Dot 5
OTHER NAMES:	Dot 5 Bake Fluid
MANUFACTURER'S PRODUCT CODE:	HI8-3047
USE:	Silicon Brake Fluid
ADDITIONAL INFORMATION:	Refer to Product Information Sheet for additional information.
OTHER INFORMATION:	Visit our website: www.hi-tecoils.com.au Email: hitecoils@hi-tecoils.com.au

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION:	NON-HAZARDOUS SUBSTANCE NON-DANGEROUS GOODS Hazard classification according to GHS Classification. Dangerous Goods classification according to Australian Dangerous Goods Code.
SIGNAL WORD (S):	None
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 skin contact avoided as far as possible.

2. HAZARDS IDENTIFICATION (CONT)

GHS HAZARD CLASSIFICATIONS

PRECAUTIONARY STATEMENTS	P102: Keep out of the reach of children. P305/P351/P338: If in eyes rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P337/313: If eye irritation persists, get medical advice. P301/31: If swallowed, call a poison centre or doctor/physician and have container or label at hand.
PREVENTION:	Avoid release to the environment.
RESPONSE:	Wash hands after handling.
STORAGE:	Store away from incompatible materials.
DISPOSAL:	Dispose of contents/container in accordance with local/regional/national/international regulations.
OTHER HAZARDS:	None known.

3. IDENTIFICATION / COMPOSITION OF INGREDIENTS

CHEMICAL CHARACTERISTICS**:** Liquid

INGREDIENTS:- Blend of Polydimethylsiloxane with added inhibitors

CHEMICAL ENTITY:	CAS No.	PROPORTION
Tributyl Phosphate	126-73-8	<1%
Other components below reportable levels	Mixture	97.75%

4. FIRST AID MEASURES

GENERAL INFORMATION:	You should call the Poisons Information Centre on 13 11 26 from anywhere in Australia (0800 764 766 in New Zealand) if you feel that you may have been poisoned, burned or irritated by this product. Have this SDS with you when you call.
INHALATION:	Remove victim to fresh air –and keep at rest. If recovery is not rapid, seek medical attention.
SKIN CONTACT:	Remove contaminated clothing. Wipe skin then wash affected area with soap and water. If irritation persists seek medical attention.

4. FIRST AID MEASURES (CONT)

EYE CONTACT:	Flush eye with plenty of water for at least 10 minutes. If irritation persists seek medical attention.
INGESTION:	Obtain medical advice immediately. If patient is fully conscious, wash out mouth with water and give plenty of water to drink. Never give anything by mouth to an unconscious person. Induce vomiting only under medical supervision.
MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:	The most important symptoms and effects are described in sections 2 and 11
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:	Medical personnel seeking to administer first aid are referred to the services of the Poisons Information Service, who can advise in such instances. There is no specific antidote and treatment of over exposure should be directed at control of symptoms and the patient's clinical condition.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Alcohol resistant foam, dry powder, carbon dioxide or water (fog or fine spray).
UNSUITABLE EXTINGUISHING MEDIA:	Water jets (although these may be used to cool adjacent containers).
SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:	No special risk – combustion products may contain harmful or irritant fumes. Containers may rupture from gas generation if exposed to fire.
ADVICE FOR FIREFIGHTERS:	Eye protection should be worn. Keep containers cool with water spray. In extreme conditions self-contained breathing apparatus and protective suit should be worn.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:	Prevent unnecessary personnel entering area of spillage. Avoid contact with eyes, skin, and clothing. When cleaning up large spills, appropriate protective clothing should be worn including body suits and impervious gloves -see section 8 for details.
ENVIRONMENTAL PRECAUTIONS:	Prevent from entering drains, ditches or rivers. If this happens inform relevant authorities. Prevent contamination of soil.

6. ACCIDENTAL RELEASE MEASURES (CONT)

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Contain spillage using sand earth or absorbent booms. Small spillages can be absorbed using rags or absorbent granules. Remove all material to a suitable container for subsequent disposal. Label Salvage Container appropriately. Flush contaminated area with plenty of water.

REFERENCES TO OTHER SECTIONS: For personsl protection see section 8. For disposal methods see section 13.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Avoid any method of handling that generates mists or aerosols. Do not eat, drink or smoke when handling this product. Wash hands thoroughly after use.

SAFE STORAGE CONDITIONS: Suitable bulk storage vessels are mild/stainless steel tanks or tight head steel drums. Always keep containers tightly closed. Avoid contamination with any other substances and in particular with mineral oils which are incompatible.

SPECIFIC END USE: Users are referred to the Specification SAE J1707 “Service Maintenance of Brake Fluids”

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

Occupational Exposure Limits

Mixture: No official figures available. Due to the low vapour pressure of the preparation, vapour is not generally a problem at ambient temperature.

Tributyl Phosphate (CAS 126-73-8): Australia: 8 hours - 0.2 ppm, 2.2 mg/m³
New Zealand: 8 hours - 0.2 ppm, 2.2 mg/m³

Derived No Effect Level (DNEL): Not determined.

Predicted No Effect Concentrations (PNEC): Not determined.

Recommended Monitoring Techniques: Personal air monitoring. An applicable standard is BS EN 14042.

EXPOSURE CONTROLS:

General: Employ good industrial hygiene practice as part of a control banding approach.

Appropriate Engineering Controls: Not necessary under normal conditions. If fluid is being heated or atomised, local exhaust ventilation with filter / scrubber is recommended.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT)

Individual Protecton Measures / Personal Protective Equipment:

Respiratory Protection –Not needed under normal conditions. Self contained breathing apparatus or Organic vapour respirators (A-P2) may be used where product is being heated or atomised and engineering control measures are not practical.
Hand Protection -Wear chemically resistant impervious gloves (EN 374) to avoid prolonged or repeated contact. Butyl rubber, Natural rubber, Nitrile rubber and PVC are suitable materials. Because of great variety of types of gloves see manufacturer's figures for breakthrough times. In the case of prolonged contact a glove with a protection class of 6 (breakthrough time of >480 min) is recommended.
Eye Protection -Wear close-fitting goggles (EN 166) or face shield where there is a risk of splashing. Eye baths should be provided at locations where accidental exposure may occur.
Skin Protection -Where significant exposure is possible wear impervious body covering. It is recommended that showers are provided at locations where accidental exposure may occur.

ENVIRONMENTAL EXPOSURE CONTROLS: No special measures required.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear, purple liquid
ODOUR:	Bland, very low odour
pH:	Not available
MELTING POINT:	<-50°C
BOILING POINT/RANGE:	>260°C
FLASHPOINT:	>150°C
FLAMMABILITY LIMITS IN AIR:	Not established as non-volatile.
AUTO IGNITION TEMPERATURE:	>400°C
DECOMPOSITION TEMPERATURE:	>400°C
EVAPORATION RATE:	Negligible
DENSITY:	0.945 - 0.965 g/ml
SOLUBILITY:	In water: immiscible In ethanol: partly soluble
PARTITION COEFF (n-octanol/water):	Not established

9. PHYSICAL AND CHEMICAL PROPERTIES (CONT)

VISCOSITY @ 20°C:	35 - 50 cSt
VAPOUR PRESSURE @ 20°C:	< 2 millibars
VAPOUR DENSITY:	Not established as non-volatile
EXPLOSIVE PROPERTIES:	Not explosive
OXIDISING PROPERTIES:	Not oxidising
OTHER INFORMATION:	No other relevant data

10. STABILITY AND REACTIVITY

REACTIVITY:	No hazardous reactions if stored and handled as indicated**.**
CHEMICAL STABILITY:	Product is stable under normal conditions.
HAZARDOUS REACTIONS:	None known.
CONDITIONS TO AVOID:	Not applicable.
INCOMPATIBLE MATERIALS:	Strong oxidising agents. Strong acids and bases. For user safety, brake fluid should never be contaminated with any other substance
HAZARDOUS DECOMPOSITION PRODUCTS:	Combustion products may include silica and oxides of carbon.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

INGESTION:	Product is of low acute oral toxicity – LD50 (oral) Rat = > 5000 mg/kg.
INHALATION:	Unlikely to be hazardous by inhalation at ambient temperatures due to low vapour pressure. If product is inhaled at elevated temperatures or as an aerosol it may irritate respiratory tract.
ASPIRATION:	No aspiration hazard expected.
SKIN CONTACT:	Acute percutaneous toxicity is very low LD50 (sk) Rabbit = > 3000 mg/kg.

IRRITATION

EYE CONTACT:	Has a mildly irritating effect on the eye but is not classes as an eye irritant. (OECD 405).

11. TOXICOLOGICAL INFORMATION

SKIN CONTACT:	Based on available data the classification criteria are not met (OECD 404). Repeated contact may de-fat the skin and cause dermatitis.
CORROSIVITY:	Based on available data the classification criteria are not met.
SENSITISATION:	Based on available data the classification criteria are not met.
REPEATED DOSE TOXICITY:	There are no reports of long term adverse effects in man.
CARCINOGENICITY:	Not known to be carcinogenic. One ingredient Tri butyl phosphate is a suspected carcinogen but this is below the classification threshold.
MUTAGENICITY:	Not known to be mutagenic.
TOXICITY FOR REPRODUCTION:	Not known to be toxic for reproduction.

12. ECOLOGICAL INFORMATION

TOXICITY:	Product is of low acute ecotoxicity although due to its water insolubility it can blanket bodies of water and starve aquatic life of oxygen. As an insoluble can contaminate ground water.
PERSISTENCE AND DEGRADABILITY:	Product is inherently biodegradable. If admitted into adapted biological water treatment plants in small quantities, no adverse effects on the degrading action of the live sludge are expected.
BIOACCUMULATIVE POTENTIAL:	Product is not expected to bioaccumulate and is of very low toxicity.
MOBILITY IN SOIL:	Insoluble in water and floats on the aqueous phase. Volatilisation from water to air not expected. Limited mobility in soil.
RESULTS OF PBT AND vPvB ASSESSMENT:	Product is considered to be neither “persistent, bio-accumulating and toxic” nor “very persistent and very bio- accumulating” according to Annex Xlll of Regulation EC 1907/2006.
OTHER ADVERSE EFFECTS**:**	Not relevant.

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS:	Dispose of in accordance with local and national regulations. In the E.U. used brake fluids are classified as Hazardous Waste. EWC number: 16.01.13. Controlled incineration or recycling is recommended. Do not dispose of to landfill or drains. It is recommended that contaminated packaging is either incinerated or cleaned and sent for recycling.

14. TRANSPORT INFORMATION

ROAD & RAIL TRANSPORT:

ADG REQUIREMENT — Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

MARITIME TRANSPORT:

IMO/IMDG REQUIREMENT — Not classified as a Dangerous Good according to the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT:

ICAO/IATA REQUIREMENT — Not classified as a Dangerous Good according to the criteria of the International Maritime Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

POISON SCHEDULE: Not scheduled.

MARINE POLLUTANT: Not a marine pollutant

ENVIRONMENTAL HAZARDS: Not environmentally hazardous

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.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

16. OTHER INFORMATION (CONT)

LITERATURE REFERENCES:

* NOHSC: 2011 National Code of Practice for the preparation of Material Safety Data Sheets.
* Safe Work Australia: 2016 Preparation of Safety Data Sheets for Hazardous Chemicals
* NOHSC: 1008 Approved Criteria for Classifying Hazardous Substances.
* NOHSC: 10005 List of Designated Hazardous Substances.
* NOHSC: 1005 Control of Workplace Hazardous Substances, National Code of Practice.
* NOHSC: 2007 Control of Workplace Hazardous Substances, National Code of Practice.
* NOHSC: 1003 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, National Exposure Standards.
* NOHSC: 3008 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, Guidance Note.
* NOHSC: 1015 Storage and Handling of Workplace Dangerous Goods, National Standard.
* NOHSC: 2017 Storage and Handling of Workplace Dangerous Goods, National Code of Practice.
* SUSDP: Standard for the Uniform Scheduling of Drugs and Poisons
* ADG: Australian Dangerous Goods Code
* MSDS of component materials.

LAST CHANGE:

Supercedes document issued: New Document
Reason/s for revision: Compliance with GHS requirements.

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END OF SDS