SAFETY DATA SHEET

1. IDENTIFICATION

Product Name:	Bendix Brake Fluid – DOT 4
Recommended Use:	Hydraulic fluid for use in automotive brake and clutch systems
Supplier:	FMP Group (Australia) Pty. Ltd
ABN:	14 004 332 496
Street Address:	Elizabeth Street Ballarat, Victoria 3350 Australia
Telephone:	**1800 819 666**
Facsimile:	**+61 35336 1274**
Emergency:	**+61 35327 0211**

2. HAZARDS IDENTIFICATION

CLASSIFICATION

Classified according to GHS and Safe Work Australia criteria

LABEL ELEMENTS

Signal Word: **WARNING**

Hazard Symbol (s):

Health Hazard

Harmful

Hazard Statement (s): **H319 Causes serious eye irritation**
H361 Suspected of damaging fertility or the unborn child

Precautionary Statements:		
General	**P101** **P102** **P103**	If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read carefully and follow all instructions.
Prevention	**P264** **P280**	Wash hands, face and all exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection and suitable respirator.
Response	**P305 + P351+ P338** **P308 + P313** **P337 + P313**	If in eyes rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. If exposed or concerned. Get medical advice / attention. If eye irritation persists. Get medical advice / attention.
Storage	**P405**	Store locked up.
Disposal	**P501**	Dispose of contents/container in accordance with local, regional, national and international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS number	Classification for ingredients	Proportion%
Ethanol; 2 [2-(2-butyloxyethoxy)ethoxy]-	143-22-6	Eye Damage CAT 1	20-40
Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-, 1,1′,1″-triester with boric acid	30989-05-0	Reproductive Toxicity CAT 2	15-25
Ethanol, 2,2'-oxybis-	111-46-6	Acute Toxicity CAT 4	5-10
3,6,9,12-Tetraoxahexadecan-1-ol	1559-34-8	Eye Irritation CAT 2	5-10
Diethylene glycol monobutyl ether	112-34-5	Eye Irritation CAT 2A	0-3
Ethanol, 2-(2-methoxyethoxy)-	111-77-3	Reproductive Toxicity CAT 2	<1
Ingredients determined to be non-hazardous			Balance
Total			**100%**

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre

Australia 131 126 New Zealand 0800 764 766

Inhalation	Move to fresh air - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.
Skin Contact	If skin or hair contact occurs, remove contaminated clothing and footwear. Wash affected skin and hair with soap and running water. If swelling, redness, blistering or irritation occurs seek medical assistance.
Eye Contact	If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.
Ingestion	Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.
Notes to Physician	Treat Symptomatically.
Poison Schedule	S5 Caution

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Equipment	If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, dry agent (carbon dioxide, dry chemical powder).
Specific Hazards Arising from the Chemical / Mixture	Combustible material.
Special Protective Equipment and Precautions for Fire Fighters	On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.
HAZCHEM Code	Not Applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	• Clear area of all unprotected personnel -slippery when spilt. • Wear protective equipment to prevent skin and eye contamination • Avoid inhalation of fumes / vapours. • Remove all ignition sources • Provide sufficient ventilation
Environmental Precautions	• Prevent product from entering sewers or waterways • If contamination of sewers or waterways has occurred advise local emergency services. • Prevent gross contamination of soil
Methods and Materials for Containment and Cleaning up	• Wipe up with absorbent materials (clean rag /paper towels or granules). • Collect and seal in properly labelled containers or drums for disposal. • Cover with damp absorbent (inert material, sand or soil). • Collect and seal in properly labelled containers or drums for disposal

7. HANDLING AND STORAGE

Precautions for Safe Handling	• Avoid contact with eyes or skin • Avoid inhalation of vapour, mist and aerosols • Do not eat, drink or smoke when handling this product • Wash thoroughly after handling with soap and water
Conditions for Safe Storage	• Store sealed in original container. • Store away from foodstuffs. • Store in a cool, dry, well-ventilated place. • Store away from sources of heat or ignition. • Keep containers closed when not in use - check regularly for leaks. • This material is a Scheduled Poison (S5) and must be stored, maintained and used in accordance with relevant regulations.

8. EXPOSURE STANDARDS AND PERSONAL PROTECTION

EXPOSURE STANDARDS

Chemical component	TWA		STEL		Classification Category	Notices
	PPM	mg/m^3	PPM	mg/m^3		
2,2'-Oxybis[ethanol]	23	100	-	-	-	-

As Published by Safe Work Australia (SWA). A list of current Australian Exposure Standards is available on the Hazardous Substances Information System (HSIS), which can be accessed from www.safeworkaustralia.gov.au

TWA = Time Weighted Average	The average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.
STEL = Short term Exposure Limit	The average airborne concentration over a 15-minute period which should not be exceeded at any time during a normal eight-hour workday.
Biological Limit Values	No Biological limit allocated
Engineering Controls	Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well-ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

INDIVIDUAL PROTECTION MEASURES

SAFETY SHOES, OVERALLS, GLOVES, CHEMICAL GOGGLES.

Eye and Face Protection	Safety Goggles or a face shield where there is a risk of splashing. Eye baths/ wash stations should be provided.
Skin Protection	Overalls and/ or other removable protective clothing is recommended. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment.
Hygiene Measures	Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Wash all contaminated clothing before storing or reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear Liquid – colourless to amber
Odour	Bland
pH	7 - 11.5
Melting point	<50 ºC
Boiling Point	>260 ºC
Flash Point	> 100ºC
Evaporation Rate	Not Established
Density	1.02 – 1.07 g/mL
Upper / Lower flammability or explosive limits	Not App
Vapour Pressure (20ºC)	< 2
Partition Coefficient	<2.0
Relative Density	Not Established
Solubility	Miscible in water
Auto ignition temperature	> 300
Viscosity	5 - 10 cSt @ 20°C
VOC (volatile carbon)	Not Established

10. STABILITY AND REACTIVITY

Chemical Reactivity	The material is non-reactive when used and stored as directed
Chemical Stability	The material is stable when used and stored as directed
Hazardous Reactions	No known hazardous reactions.
Conditions to Avoid	Elevated temperatures and sources of ignition.
Incompatible Materials	Oxidising agents
Hazardous Decomposition Products	Oxides of carbon and nitrogen, smoke and other toxic fumes.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs.

Acute Effects	**Inhalation:** Material may be an irritant to mucous membranes and respiratory tract. **Skin contact:** Contact with skin may result in irritation. **Ingestion:** Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract. **Eye contact:** An eye irritant

Inhalation Ingestion	Mixture	This material has been classified as not hazardous for acute inhalation exposure. This material has been classified as not hazardous for acute ingestion exposure.
Skin corrosion / Irritation	Mixture	Classified as non-hazardous for acute dermal exposure.
Serious Eye Damage / Irritation	Mixture	Causes serious eye damage (corrosion).
Respiratory or skin sensitization	Mixture	Not classed as respiratory or skin sensitiser
Germ cell mutagenicity	Mixture	Classified as non-mutagenic
Carcinogenicity	Mixture	Classified as non-carcinogen
Reproductive toxicity	Mixture	Classified as reproductive toxicant
Specific Target Organ Toxicity (STOT) – single exposure	Mixture	Classified as non-target organ toxicant
Specific Target Organ Toxicity (STOT) – repeated exposure	Mixture	Classified as non-target organ toxicant
Aspiration Hazard	Mixture	No aspiration hazard expected.

12. ECOLOGICAL INFORMATION

Avoid contaminating Waterways.
Material is classified as non-hazardous for acute aquatic exposure.
Material is classified as non-hazardous for chronic aquatic exposure.

Ecotoxicity	No information available	
Persistence and biodegradability	Mixture	No information available
Bio accumulative Potential	Mixture	No information available
Mobility in Soil	Mixture	No information available
Other Adverse Effects	Mixture	Classified as non-hazardous (Acute and Chronic)

13. DISPOSAL CONSIDERATIONS

Disposal	Dispose of in accordance with local and national regulations. Contaminated packaging must be recovered or disposed of in compliance with local waste management regulations.
Disposal Considerations	Persons conducting disposal activities please refer to the information in section 8 – Exposure Controls and Personal Protection of this SDS

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

UN Number	Not Available
Proper Shipping or Technical Name	Not Available
Transport Hazard Class	Not Available
Packing Group	Not Available
Environmental; Hazards for Transport Purposes	Not Available
Special Precautions for the User	Not Available
Additional Information	Not Available
HAZCHEM or Emergency Action Code	Not Available

MARINE TRANSPORT
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

The product is subject to the following international agreements

Montreal Protocol (Ozone Depleting Substances)	Not Applicable
The Stockholm Convention (Persistent Organic Pollutants)	Not Applicable
The Rotterdam Convention (Prior Informed Consent)	Not Applicable
Basel Convention (Hazardous Waste)	Not Applicable
International Convention for the prevention of Pollution from Ships (MARPOL)	Not Applicable
The product is subject to the following Health Safety and Environmental Regulation	
Standard for the uniform scheduling of medicines and poisons (SUSMP)	Poisons Schedule: S5
Australian inventory of chemical substances (AICS)	Not Applicable for product Constituents as listed
HSNO Group Standard	Lubricants, Lubricant additives, coolants and anti-freeze agents

16. OTHER INFORMATION

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

SDS Preparation Information

SDS Version	Reason for Revision	Notes
1.0	Release in GHS Format	SDSID: DOT4231116
2.0	Ingredient update	SDSID: DOT4000019
4.0	Ingredient update	SDSID: DOT4000024

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since FMP Group (Australia) Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.
Safety Data Sheets are updated frequently. Please ensure you have a current copy.

Abbreviations and Acronyms Used in preparation of the SDS

GHS	Global Harmonized System of Classification and Labelling
ADG	Australian Dangerous Goods Code
SWA	Safe Work Australia
TWA	Time Weighted Average
PPM	Parts Per Million
mg/m3	Milligrams per cubic meter
STEL	Short Term Exposure Limit
LD50	Lethal Dose 50%
LC50	Lethal Concentration 50%
IARC	International Agency for Research on Cancer
STOT	Specific Target Organ Toxicity