

SAFETY DATA SHEET

Gulf Brake Fluid DOT 4

07118

Issuing Date 01-30-2018

Not Applicable

Revision Date 01-30-2018

Version 1

SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier

Product Name Product Code(s) Gulf Brake Fluid DOT 4 07118

Other means of identification

UN Number

Recommended use of the chemical and restrictions on use

Recommended Use Brake fluid

Uses advised against Any other purpose.

Suppliers name, address and phone number

Gulf Oil Supply Company Limited B2 Industry Street, Qormi, QRM 3000, Malta +44 207 321 6219 products@gulfoilltd.com sds@gulfoilltd.com

Emergency telephone number Europe (+) 44 808 189 0979 Code 334276 (+) 1 760 476 3961 Code 334276 (+) 32 (0) 3241 33 55

Poison Information Center telephone number

(AU) 13 11 26, (NZ) 0800 764 766

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Serious eye damage/eye irritation

Label elements

Contains Butyl triglycol

Exclamation mark

Category 2 - (H319)



Signal word WARNING

Hazard statements H319 - Causes serious eye irritation

Precautionary Statements - Prevention

Wear eye protection/ face protection Wash face, hands and any exposed skin thoroughly after handling **Precautionary Statements - Response** Not applicable **Eyes** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Other hazards

No information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture. Health hazard information is based on its ingredients

Chemical name	CAS No	Weight-%
Butyl triglycol	143-22-6	25% - 60%
2,2'-Oxydiethanol	111-46-6	2.5% - 10%
2-(2-methoxyethoxy)ethanol	111-77-3	2.5% - 10%
2-(2-Butoxyethoxy)ethanol	112-34-5	2.5% - 10%

The remaining composition is a mixture of non-classified ingredients or additives below the threshold for disclosure

SECTION 4: FIRST AID MEASURES

Description of first-aid measures

General advice	Do not get in eyes, on skin, or on clothing. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
Ingestion	Immediate medical attention is required. Clean mouth with water and afterwards drink plenty of water. Rinse mouth again and drink 1-2 glasses of water and 40 ml ethanol (liquor). Do not induce vomiting without medical advice.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.
Most important symptoms and effects, both acute and delayed	

Main Symptoms

Eve damage/irritation

Indication of immediate medical attention and special treatment needed

Notes to physician

Symptoms may be delayed.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment:, Use CO2, dry chemical, or foam, Water spray or fog

Extinguishing media which shall not be used for safety reasons Do not use water jet

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous decomposition products

Hydrogen peroxide

Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Advice for non-emergency Material can create slippery conditions.

Advice for emergency responders For personal protection see section 8.

Environmental precautions

personnel

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

Reference to other sections

See Section 8/12/13 for additional information

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Ensure adequate ventilation. Prevent the formation of vapors, mists and aerosols. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Store in original container. Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials

Strong oxidizing agents

Recommended Use

Brake fluid

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	Australia	New Zealand	New Zealand - Biological Exposure Indices (BEI)
2,2'-Oxydiethanol	TWA: 23 ppm TWA: 100 mg/m ³	TWA: 23 ppm TWA: 101 mg/m ³	

Australia - Workplace Exposure Standards for Airborne Contaminants. New Zealand - Workplace Exposure Standards and Biological Exposure Indices.

Appropriate engineering controls

Engineering controls	Ensure adequate ventilation, especially in confined areas.	
Individual protection measures, suc	ch as personal protective equipment	
Eye/face protection Skin and body protection Hand Protection	Tightly fitting safety goggles. Eye protection must conform to standard EN 166. Long sleeved clothing. Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts,	
Respiratory protection	abrasion. No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.	
Hygiene measures	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.	
Environmental Exposure Controls Thermal hazards	No special environmental precautions required. None under normal use conditions	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Appearance	clear amber
Odor	bland	Odor threshold	Not Determined
Property pH	<u>Values</u> 7.0 - 11.50	Remarks	-

Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas)	< -50 °C / < -58 °F >260 °C / > 500 °F > 100 °C / > 212 °F Not Determined Not Determined	
Flammability Limit in Air Upper flammability limit: Lower flammability limit:	Not Determined Not Determined	
Vapor pressure	<2	mbar
Vapor density Relative density	Not Determined	@20°C
Solubility(ies)	Water solubility: Miscible	6200
Partition coefficient	<2.0	
Autoignition temperature Decomposition temperature	> 300 °C / > 572 °F > 300 °C	
Kinematic viscosity	5-10 cSt @ 20 °C	
Explosive properties	Not applicable	
Oxidizing Properties	Not applicable	
Other Information		
Viscosity, kinematic (100°C)	Not Determined	
Pour Point	Not Determined	
VOC Content (ASTM E-1868-10)	Not Determined	
VOC content	Not Determined	

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None under normal use conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

Contact with metals may evolve flammable hydrogen gas; Aluminium

Conditions to avoid

Do not allow evaporation to dryness

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hydrogen peroxide

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

Product Information - Principle Routes of Exposure

Inhalation None known

Eye contact	Irritating to eyes
Skin contact	None known
Ingestion	None known

Numerical measures of toxicity - Product Information

ATEmix (oral)	>2000 mg/kg
ATEmix (dermal)	93,103.00 mg/kg

Acute toxicity - Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Acute toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Butyl triglycol	= 5300 mg/kg(Rat)	= 3480 mg/kg (Rabbit)	
2,2'-Oxydiethanol	12565 mg/kg(Rat)	= 11890 mg/kg (Rabbit)	
2-(2-methoxyethoxy)ethanol	= 9210 mg/kg(Rat)	= 9404 mg/kg (Rabbit)	
2-(2-Butoxyethoxy)ethanol	3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Irritating to eyes.
Sensitization Respiratory Sensitization Skin sensitization	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ systemic toxicity (single exposure)	Based on available data, the classification criteria are not met
Specific target organ systemic toxicity (repeated exposure)	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met.
Exposure levels	See section 8 for more information
Interactive effects	None known

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

No special environmental measures are necessary

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Butyl triglycol	500: 72 h Desmodesmus subspicatus mg/L EC50	2400: 96 h Pimephales promelas mg/L LC50 static 2400: 96 h Pimephales promelas mg/L LC50 2200 - 4600: 96 h Leuciscus idus mg/L LC50 static		500: 48 h Daphnia magna mg/L EC50
2,2'-Oxydiethanol	1000: 72 h Skeletonema costatum mg/L EC50	75200: 96 h Pimephales promelas mg/L LC50 flow-through		84000: 48 h Daphnia magna mg/L EC50
2-(2-methoxyethoxy)ethanol	>1000: 96 h Pseudokirchnerella subcapitata mg/L EC50	5741: 96 h Pimephales promelas mg/L LC50		1192: 48 h Daphnia magna mg/L EC50
2-(2-Butoxyethoxy)ethanol	100: 96 h Desmodesmus subspicatus mg/L EC50	1300: 96 h Lepomis macrochirus mg/L LC50 static		2850: 24 h Daphnia magna mg/L EC50 100: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulative potential

Chemical name	Partition coefficient
Butyl triglycol	0.51
2,2'-Oxydiethanol	-1.98
2-(2-methoxyethoxy)ethanol	-0.49

Mobility

The product is water soluble, and may spread in water systems

Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

Safe handling and disposal methods

Dispose of as hazardous waste in compliance with local and national regulations

Disposal of any contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Observe all label precautions until container is cleaned, reconditioned or destroyed.

Environmental regulations

No information available

SECTION 14: TRANSPORT INFORMATION

ADG

Not regulated

IMDG Not regulated

<u>IATA</u>

Not regulated

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

<u>Australia</u>

Model Work Health and Safety Regulations (2016). Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (2011).

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP) No poisons schedule number allocated

New Zealand

Hazardous Substances Regulation 2001.

New Zealand HSNO Approval Number: HSNO Hazard Classification: Lubricants (Low Hazard) Group Standard 2006 HSR002605 6.4A

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Chemicals Subject to Prior Informed Consent (PIC) Not applicable

International Inventories

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory All ingredients are on the inventory or exempt from listing

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List All ingredients are on the inventory or exempt from listing

AICS - Australian Inventory of Chemical Substances All ingredients are on the inventory or exempt from listing

PICCS - Philippines Inventory of Chemicals and Chemical Substances All ingredients are on the inventory or exempt from listing

KECL - Korean Existing and Evaluated Chemical Substances All ingredients are on the inventory or exempt from listing

IECSC - China Inventory of Existing Chemical Substances All ingredients are on the inventory or exempt from listing

ENCS - Japan Existing and New Chemical Substances All ingredients are on the inventory or exempt from listing

TCSI - Taiwan National Existing Chemical Inventory Contact supplier for inventory compliance status

NZIOC - New Zealand Inventory of Chemicals All ingredients are on the inventory or exempt from listing

Other Information Not applicable

SECTION 16: OTHER INFORMATION

Issuing Date	01-30-2018
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Revision Note Initial Release

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA	Time weighted average	STEL	Short term exposure limit	
Ceiling	Maximum limit value:	(s) - Skin	Skin designation	
+	Sensitizers	Ċ	Carcinogen	
STOT SE - Specific target organ systemic toxicity (Single exposure)				

STOT RE - Specific target organ systemic toxicity (repeated exposure)

VOC - Volatile organic compounds

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet