

Material Safety Data Sheet

BRAKE FLUID

EXOL BRAKE FLUID API DOT 4

Type of Oil: Brake Fluid



SECTION 01 - IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

- 1.1 Product Name** : EXOL BRAKE FLUID
- 1.2 SAE Viscosity** :
- 1.3 API** : DOT 4
- 1.4 Supplier** : Gulf Worldwide Distribution FZE, MO 0253, Jebel Ali Free Zone, PO Box 261619, Dubai U.A.E.
- 1.5 Emergency Telephone** : +9714 8814100

SECTION 02 - COMPOSITION AND INFORMATION ON INGREDIENTS

- 2.1 Chemical Names of Substance** Lubricating oils
- 2.2 Components**
- | | |
|----------------------------------------------------------------|-----|
| 2.2.1 Hydro Treated Paraffinic Distillate | 80% |
| Solvent Refined Heavy paraffinic distillate | |
| Solvent dewaxed heavy paraffinic distillate | |
| 2.2.2 Additives which may include Dispersant, Detergent | 20% |
| Viscosity Index Improver, Pour point Depresant, Antifoam | |

SECTION 03 - HAZARDS IDENTIFICATION

3.1 This product is of low oral and dermal toxicity and under normal conditions of use should present no significant health hazards. However, prolonged and repeated skin contact should be avoided to preclude any risk of dermatitis. Breathing the vapors or mist at concentrations in air that cause respiratory irritation or discomfort.

SECTION 04 - FIRST AID MEASURES

4.1 Eye Contact : Remove and wash contaminated clothing and shoes. Wash exposed portions of the skin with soap and water. Prolonged or frequent skin contact may cause various skin disorders such as dermatitis, oil acne, skin redness and edema.

4.2 Inhalation : Vapor inhalation under ambient conditions is normally not a problem. Move person to fresh air immediately. If breathing has stopped, apply artificial respiration and administration oxygen if necessary.

4.3 Ingestion : Seek medical attention. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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SECTION 05 - FIRE FIGHTING MEASURES

- 5.1 Flash Point** : Minimum 215 (ASTM D93)
- 5.2 Extinguishing Media** : Foam, Dry Chemical, Carbon Dioxide
- 5.3 Fire and Explosion Hazards** : Combustible material, low hazard. The product can form flammable mixtures or can burn only on heating above the flash point. However, minor contamination by hydrocarbons of higher volatility may increase the hazard.
- 5.4 Special Fire Fighting Procedures:** Use water only to cool fire exposed containers.
- 5.5 Explosion Hazards** : For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency

SECTION 06 - ACCIDENTAL RELEASE MEASURES

6.1 In case of Spill Stop the source of the leak or release contain spill if possible. Ventilate the area. Cover spill with absorbent material. Use mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water

SECTION 07 - HANDLING AND STORAGE

7.1 Handling: Store in dry place at room temperature. The protective measures as usual in the mineral oil industry have to be observed. Adequate ventilation in working area may be necessary. Provide suitable mechanical equipment for the safe handling of drums and heavy packages.

7.2 Load/Unload Temperature : Minimum feasible handling temp less than 50 deg.c

7.3 Storage Temperature : Ambient to 50

7.4 Special Precautions : Keep containers closed when not in use. Prevent small spillage and leakage to avoid slip hazard.

SECTION 08 - EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 Eye Protection : Wear chemical goggles to prevent eye contact.

8.2 Skin Protection : Use chemical-resistant gloves, if needed.

8.3 Inhalation : Respiratory Protection is normally not required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standards, the use of an respirator is recommended.

8.4 Ventilation : Adequate ventilation in accordance with good engineering practice must be provided to keep any oil mist concentration below the PEL.

8.5 Exposure Limits : 5 mg/ * for mineral oil mist average over an 8 hour daily exposure.(ACGIH)

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SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

The following data may represent a range of approximate or typical values for products. Precise technical information is provided in Product Bulletins and can be obtained from your Marketing representative.

Test	Test Method	Units	Typical Reports
Appearance	Visual	None	Clear & Bright
Density @ 20° C	IP 160	g/ml	1.05
Viscosity, cSt @ 40° C	IP 71	°C	Max. 1500
Viscosity, cSt @ 100° C	ASTM D445	mm ² /s	Min. 2.10
Water	ASTM D1123	% wt	0.2
ERBP ° C (dry)	ASTM D1120	°C	260
ERBrC (Wet)	SAE J1703	°C	160
pH Value	SAE J1703	pH	7.5

SECTION 10 - STABILITY & REACTIVITY

10.1 Incompatible Materials : Avoid contact with strong oxidants such as liquid chlorine and concentrated oxygen.

10.2 Hazardous Decomposition Products : Product does not decompose at ambient temperature.

10.3 Stability : Stable under normal ambient.

10.4 Reactivity Data :

10.5 Condition to avoid : None known.

10.6 Material to avoid : None known.

10.7 Hazardous Polymerization : Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 No data available.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 In the absence of specific environmental data for this product, this assessment is based on information for general hydrocarbon components found in lubricant mineral oils. Lubricant mineral oils, immediately following a release into the environment, will remain largely on the soil surface, on the water surface and in the water. Based on chemical/physical information from the literature for this product category, no harmful effects to terrestrial or aquatic habitats would be expected. This product is expected to be resistant to biodegradation and to persist in the environment.

SECTION 13 - DISPOSAL CONSIDERATION

13.1 Waste Disposal Method : Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulation. Contact local environmental or health authorities for approved disposal of this material. Waste materials should be dumped or buried in an approved industrial waste land-fill. Large quantities may be disposed of by incineration in a suitable combustion chamber.

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SECTION 14 - TRANSPORT INFORMATION

14.1 D.O.T.	:
14.2 Reportable Quantity	:
14.3 Freight Classification	: Petroleum Lubricating Oil
14.4 Special Transportation Notes	: Not Dangerous as per IATA regulation or Not classified as dangerous GOODS

SECTION 15 - REGULATORY INFORMATION

15.1 Not applicable

SECTION 16 - OTHER INFORMATION

16.1 To the best of our knowledge, the information provided in this MSDS document is correct. Also, it is possible that additional data could be made available after this MSDS was issued. Certain hazards are described herein, however, these may not be the only hazards that exist. All materials may present unknown hazards and should be used with caution. Customers are encouraged to review this information, follow precautions and comply with all applicable laws and regulations regarding the use and disposal of this product. For specific technical data or advice concerning this product as supplied in your country please contact your local sales representative. The final determination of the suitability of any material is the sole responsibility of the user. The information presented herein has been compiled with sources considered to be dependable and is accurate to the best of seller's knowledge; however, seller makes no warranty whatsoever regarding the accuracy of such data or the results to be obtained from the use thereof.

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January 5, 2014

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