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AMALIE OIL COMPANY

Better than it has to be

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Safety data sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- Trade name: AMALIE DOT 3 BRAKE FLUID
- **Application of the substance / the preparation** Lubricating oil
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
AMALIE OIL COMPANY

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36: Irritating to eyes.

- **Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

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- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

- **2.2 Label elements**

- **Labeling according to Regulation (EC) No 1272/2008**

The product is classified and labeled according to the CLP regulation.

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger

- **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H304 May be fatal if swallowed and enters airways.

- **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P362 Take off contaminated clothing and wash before reuse.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P331 Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Hazard description:**

- **WHMIS-symbols:**

D2B - Toxic material causing other toxic effects



- **HMIS Long Term Health Hazard Substances**

None of the ingredients is listed.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 143-22-6 EINECS: 205-592-6 Index number: 603-183-00-0	2-[2-(2-butoxyethoxy)ethoxy]ethanol ☒ Xi R41 ☒ Eye Dam. 1, H318	27%
CAS: 111-46-6 EINECS: 203-872-2 Index number: 603-140-00-6	2,2'-oxybisethanol ☒ Xn R22 ☒ Acute Tox. 4, H302	16%
CAS: 112-50-5 EINECS: 203-978-9	2-(2-(2-ethoxyethoxy)ethoxy)ethanol ☒ Xi R36/38 ☒ Skin Irrit. 2, H315	16%
CAS: 1559-34-8 EINECS: 216-322-1	3,6,9,12-tetraoxahexadecan-1-ol ☒ Xi R36/38 ☒ Skin Irrit. 2, H315; Eye Irrit. 2, H319	11%
CAS: 112-35-6 EINECS: 203-962-1	2-(2-(2-methoxyethoxy)ethoxy)ethanol ☒ Xi R36/38 ☒ Skin Irrit. 2, H315; Eye Irrit. 2, H319	8%
CAS: 112-34-5 EINECS: 203-961-6 Index number: 603-096-00-8	2-(2-butoxyethoxy)ethanol ☒ Xi R36 ☒ Eye Irrit. 2, H319	6%
CAS: 111-90-0 EINECS: 203-919-7	2-(2-ethoxyethoxy)ethanol ☒ Xi R36 ☒ Eye Irrit. 2, H319	2 %

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Protect unharmed eye.
Rinse opened eye for several minutes under running water.
Remove contact lenses if worn.

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Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

- **Hazards**

Danger of pulmonary oedema.

Danger of impaired breathing.

Danger of convulsion.

- **4.3 Indication of any immediate medical attention and special treatment needed**

If swallowed, gastric irrigation with added, activated carbon.

If swallowed or in case of vomiting, danger of entering the lungs.

Monitor circulation, possible shock treatment.

Medical supervision for at least 48 hours.

Later observation for pneumonia and pulmonary oedema.

If necessary oxygen respiration treatment.

5 Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

- **5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Particular danger of slipping on leaked/spilled product.

Ensure adequate ventilation

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

- **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent

- **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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7 Handling and storage

- **7.1 Precautions for safe handling**
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 Store in a cool location.
 Protect from humidity and water.
- **Information about storage in one common storage facility:**
 Store away from foodstuffs.
 Store away from oxidizing agents.
- **Further information about storage conditions:**
 Store in cool, dry conditions in well sealed receptacles.
 This product is hygroscopic.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

111-46-6 2,2'-oxybisethanolWEEL (USA) 10 mg/m³**112-34-5 2-(2-butoxyethoxy)ethanol**

TLV (USA)	50 mg/m ³ , NIC-7 ppm Inhalable fraction and vapor
IOELV (EU)	Short-term value: 101,2 mg/m ³ , 15 ppm Long-term value: 67,5 mg/m ³ , 10 ppm

111-90-0 2-(2-ethoxyethoxy)ethanol

WEEL (USA)	25 ppm
EV (Canada)	165 mg/m ³ , 30 ppm

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.

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Avoid contact with the eyes.
 Avoid close or long term contact with the skin.

- **Respiratory protection:**

Not necessary if room is well-ventilated.
 Use suitable respiratory protective device in case of insufficient ventilation.

- **Protection of hands:**



Protective gloves

- **Material of gloves**

Butyl rubber, BR
 Natural rubber, NR
 Nitrile rubber, NBR
 Neoprene gloves

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Colour:	Yellow
Odour:	Mild
Odour threshold:	Not determined.

- **pH-value:** 10,9

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	224°C (435 °F)

- **Flash point:** 243°C (469,4 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 203°C (397 °F)

- **Decomposition temperature:** Not determined.

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· Self-igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density at 20°C:	1,03 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Viscosity Index:	13
Kinematic at 40°C:	5,0 cSt (1,5 cSt at 100 °C)
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids and oxidizing agents.
- **10.4 Conditions to avoid**
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

111-46-6 2,2'-oxybisethanol

Oral LD50 12565 mg/kg (rat)

Dermal LD50 11890 mg/kg (rabbit)

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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitizing effect by skin contact is possible by prolonged exposure.
- **Additional toxicological information:**
 The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
 Irritant

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** The product contains materials that are harmful to the environment.
- **12.2 Persistence and degradability** The product is not easily, but potentially degradable.
- **12.3 Bioaccumulative potential** Not worth-mentioning accumulating in organisms
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
 At present there are no ecotoxicological assessments.
 This statement was deduced from products with a similar structure or composition.
 Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
 Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
 Delivery of waste oil to officially authorized collectors only.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **14.1 UN-Number**
- **DOT, ADN, IMDG, IATA** N/A

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· 14.2 UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	N/A
· 14.3 Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class	N/A
· 14.4 Packing group · DOT, ADR, IMDG, IATA	N/A
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	-

15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

Contains glycol ethers, which are listed as a chemical family under Section 313.

111-46-6 | 2,2'-oxybisethanol

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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· **Carcinogenic Categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Canada**· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol

112-34-5 2-(2-butoxyethoxy)ethanol

111-90-0 2-(2-ethoxyethoxy)ethanol

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

R22 Harmful if swallowed.

R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.

R41 Risk of serious damage to eyes.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

Sources

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