

# SAFETY DATA SHEET

## 1. Identification of the substance/preparation and company/undertaking

<b>Product name</b>	<b>Yamaha Yamalube Brake Fluid Dot 4</b>
<b>SDS no.</b>	467658
<b>Use of the substance/mixture</b>	Brake fluids. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
<b>Supplier</b>	Castrol BP Petco Ltd. 7 th Floor, Central Plaza Office Building 17 Le Duan Street, District 1 HCMC, Vietnam Tel: 84-8-38219596 / 38219153 Fax: 84-8-38219603 / 38219152
<b>Emergency telephone number</b>	Carechem: +65 3158 1074 (24 hours)
<b>Code</b>	467658-MY03

## 2. Composition/information on ingredients

Substance/preparation	Preparation	Concentration	CAS no.	Classification
<b>Chemical name</b>				
2-(2-(2-butoxyethoxy)ethoxy)ethanol		10 - 20	143-22-6	Xi; R41
Diethylene glycol; 2,2'-oxybisethanol		10 - 20	111-46-6	Xn; R22
Di-isopropanolamine		1 - 5	110-97-4	Xi; R36

See Section 16 for the full text of the R-phrases declared above.

Occupational exposure limits, if available, are listed in Section 8.

## 3. Hazards identification

This preparation is not classified as dangerous.

<b>Physical/chemical hazards</b>	Not classified as hazardous.
<b>Health hazards</b>	Not classified as hazardous.
<b>Routes of entry</b>	Dermal contact. Eye contact. Inhalation.
<b>Effects and symptoms</b>	
<b>Eyes</b>	No significant health hazards identified.
<b>Skin</b>	No significant health hazards identified.
<b>Inhalation</b>	No significant health hazards identified.
<b>Ingestion</b>	No significant health hazards identified.

## 4. First-aid measures

<b>Eye contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation occurs.
<b>Skin contact</b>	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention if symptoms appear. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Ingestion</b>	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water if person is conscious.
<b>Notes to physician</b>	Treatment should in general be symptomatic and directed to relieving any effects.

## 5 . Fire-fighting measures

### Extinguishing media

**Suitable** In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

**Not suitable** Do not use water jet.

### Hazardous decomposition products

Combustion products may include the following:  
carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)  
nitrogen oxides (NO, NO<sub>2</sub> etc.)

### Unusual fire/explosion hazards

In a fire or if heated, a pressure increase will occur and the container may burst.

### Special fire-fighting procedures

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

### Protection of fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

---

## 6 . Accidental release measures

### Personal precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see Section 8).

### Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

### Small spill

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

---

## 7 . Handling and storage

### Handling

Put on appropriate personal protective equipment. Wash thoroughly after handling. Avoid breathing vapour or mist. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid and as a result may induce allergic skin reactions. Avoid prolonged or repeated contact with skin. Evaporation of water from soluble cutting fluids during use may lead to an increase in concentration which may result in the development of skin conditions due to irritation and defatting. It is important to monitor fluid strength on a regular basis with a refractometer and maintain it at the recommended concentration. Lubricants from other sources and other contaminants should be minimised. Swarf and other debris should be removed. To maintain optimum performance and minimise bacterial spoilage, machine tool coolant systems should be cleaned on a regular basis.

### Storage

Store and use only in equipment/containers designed for use with this product. Keep away from heat and direct sunlight. Protect from freezing. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).

---

## 8 . Exposure controls/personal protection

### Occupational exposure limits

This product does not have any assigned OELs.

### Exposure controls

#### Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

None required. However, use of adequate ventilation is good industrial practice.

#### Skin and body

None required; however, use of protective clothing is good industrial practice.

**Hands** Wear protective gloves if prolonged or repeated contact is likely. Chemical-resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

**Eyes** Safety glasses with side shields.

## 9 . Physical and chemical properties

**Physical state** Liquid.  
**Colour** Yellow.  
**Odour** Characteristic.  
**Flash point** Closed cup: >125°C (>257°F) [Pensky-Martens.]  
**Viscosity** Kinematic: 15 to 17 mm<sup>2</sup>/s (15 to 17 cSt) at 20°C  
**Density** 1055 to 1075 kg/m<sup>3</sup> (1.055 to 1.075 g/cm<sup>3</sup>) at 20°C  
**Solubility** Miscible in water.

## 10 . Stability and reactivity

**Stability** The product is stable.  
**Conditions to avoid** No specific data.  
**Materials to avoid** Reactive or incompatible with the following materials: oxidising materials.  
**Hazardous decomposition products** Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 . Toxicological information

**Chronic toxicity**  
**Carcinogenic effects** No known significant effects or critical hazards.

## 12 . Ecological information

**Persistence/degradability** The biodegradability of this material has not been determined.  
**Mobility** Spillages may penetrate the soil causing ground water contamination.  
**Bioaccumulative potential** This product is not expected to bioaccumulate through food chains in the environment.  
**Other ecological information** Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

## 13 . Disposal considerations

**Disposal considerations / Waste information** The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## 14 . Transport information

**International transport regulations**  
Not determined.

## 15 . Regulatory information

### European Union - Label requirements

**Risk phrases** This product is not classified as hazardous under applicable regulations.

### Other regulations

**REACH Status** For the REACH status of this product please consult your company contact, as identified in Section 1.

**United States inventory (TSCA 8b)** All components are listed or exempted.

**Australia inventory (AICS)** At least one component is not listed.

**Canada inventory** At least one component is not listed.

**China inventory (IECSC)** All components are listed or exempted.

<b>Japan inventory (ENCS)</b>	At least one component is not listed.
<b>Korea inventory (KECI)</b>	All components are listed or exempted.
<b>Philippines inventory (PICCS)</b>	All components are listed or exempted.
<b>Additional warning phrases</b>	Safety data sheet available for professional user on request.
<b>Vietnam</b>	
<b>Toxic classification (TCVN 3164-79)</b>	Not classified as hazardous.

## 16 . Other information

### History

<b>Date of issue/ Date of revision</b>	29 September 2011
<b>Date of previous issue</b>	No previous validation
<b>Prepared by</b>	Product Stewardship

### Notice to reader

☑ Indicates information that has changed from previously issued version.

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.