# Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 15/12/2006 Revision date: 11/05/2015 Supersedes: 06/01/2012 Version: 3.0

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture

Product name. : WOLF BRAKE FLUID DOT 3&4

Product code : 5015
Product group : Blend

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec. : Used in closed systems
Non-dispersive use

Function or use category : brake fluids

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

WOLF OIL CORPORATION N.V. Georges Gilliotstraat, 52 2620 Hemiksem - België T 0032 (0)3 870 00 00 / 0476/23 33 14 info@wolfoil.com

1.4. Emergency telephone number

Emergency number : 0032 (70) 245 245

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 H319

Full text of H-phrases: see section 16

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

Xi; R36

Full text of R-phrases: see section 16

## Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

# Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H319 - Causes serious eye irritation

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand

P102 - Keep out of reach of children

P280 - Wear eye protection

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

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

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

regulations

## 2.3. Other hazards

## No additional information available

11/05/2015 EN (English) 1/6

# Safety Data Sheet

according to Regulation (EC) No. 453/2010

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
butoxytriethylene glycol	(CAS No) 143-22-6 (EC no) 205-592-6 (EC index no) 603-183-00-0 (REACH-no) 01-2119531322-53	20 - 45	Xi; R41
diethylene glycol	(CAS No) 111-46-6 (EC no) 203-872-2 (EC index no) 603-140-00-6	0 - 10	Xn; R22
2-(2-butoxyethoxy)ethanol	(CAS No) 112-34-5 (EC no) 203-961-6 (EC index no) 603-096-00-8	0 - 3	Xi; R36
2-(2-methoxyethoxy)ethanol	(CAS No) 111-77-3 (EC no) 203-906-6 (EC index no) 603-107-00-6	0 - 3	Repr.Cat.3; R63
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
butoxytriethylene glycol	(CAS No) 143-22-6 (EC no) 205-592-6 (EC index no) 603-183-00-0 (REACH-no) 01-2119531322-53	20 - 45	Eye Dam. 1, H318
diethylene glycol	(CAS No) 111-46-6 (EC no) 203-872-2 (EC index no) 603-140-00-6	0 - 10	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
2-(2-butoxyethoxy)ethanol	(CAS No) 112-34-5 (EC no) 203-961-6 (EC index no) 603-096-00-8	0 - 3	Eye Irrit. 2, H319
		0 - 3	Repr. 2, H361d

Full text of R-, H- and EUH-phrases: see section 16

## **SECTION 4: First aid measures**

4.1.	Description	of first aid	measures

First-aid measures general : Remove/Take off immediately all contaminated clothing.

First-aid measures after inhalation : If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Seek

medical advice.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately

with plenty of water.

First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Seek medical

attention if ill effect or irritation develops.

First-aid measures after ingestion : Get immediate medical advice/attention.

## 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal

use.

Symptoms/injuries after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.

Symptoms/injuries after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal

use.

Symptoms/injuries after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal

# 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Powder. Strong water jet. Alcohol resistant foam.

## 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire.

11/05/2015 EN (English) 2/6

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Impound and recover large spill by mixing it with inert granular solids.

Methods for cleaning up : Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.

Other information : Spill area may be slippery. Use suitable disposal containers.

#### 6.4. Reference to other sections

No additional information available

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling : Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually

required.

Handling temperature : < 40 °C

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and

when leaving work.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage temperature : < 40 °C

Storage area : Store in dry, cool, well-ventilated area.

#### 7.3. Specific end use(s)

No additional information available

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

Personal protective equipment : Safety glasses. Gloves.





Hand protection : Wear suitable gloves resistant to chemical penetration. butyl rubber gloves.

Eye protection : Safety glasses.

Skin and body protection : No special clothing/skin protection equipment is recommended under normal conditions of use.

Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Liquid.

Colour : yellow.

Odour : Characteristic.

Odour threshold : No data available

pH : 7,5 - 11,5 SAE J 1703

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

11/05/2015 EN (English) 3/6

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

Freezing point : <-50 °C SAE J 1703 Boiling point : >230 °C SAE J 1703 Flash point : >100 °C IP35

Self ignition temperature : > 300 °C ASTM D286

Decomposition temperature : > 300 °C

Flammability (solid, gas) : No data available
Vapour pressure : < 2 mbar @20 °C
Relative vapour density at 20 °C : No data available
Relative density : No data available

Density : 1,02 - 1,07 kg/m³ DIN 51757

Solubility : Soluble.
Log Pow : < 2 OCDE 117

Viscosity, kinematic : 5 - 10 cSt @ 20°C ASTM D445

Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

None under normal conditions.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

None under normal conditions.

## 10.4. Conditions to avoid

No data available.

#### 10.5. Incompatible materials

Strong oxidizers. acids. Bases.

## 10.6. Hazardous decomposition products

None under normal conditions.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Not classified

WOLF BRAKE FLUID DOT 3&4	
LD50 oral rat	>= 5000 mg/kg
LD50 dermal rabbit	>= 3000 mg/kg

diethylene glycol (111-46-6)		
	ATE (oral)	500.000 ma/ka bodyweiaht

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

pH: 7,5 - 11,5 SAE J 1703 : Causes serious eye irritation.

Serious eye damage/irritation : Causes serious eye irritation pH: 7,5 - 11,5 SAE J 1703

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

11/05/2015 EN (English) 4/6

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

WOLF BRAKE FLUID DOT 3&4	
LC50 fishes 1	> 100 mg/l Oncorhynchys mykiss

## 12.2. Persistence and degradability

WOLF BRAKE FLUID DOT 3&4	
Biodegradation	90 % 15d Static test

## 12.3. Bioaccumulative potential

WOLF BRAKE FLUID DOT 3&4		
Log Pow	< 2 OCDE 117	

## 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Additional information : Dispose in a safe manner in accordance with local/national regulations.

## **SECTION 14: Transport information**

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

#### 14.1. UN number

No dangerous good in sense of transport regulations

#### 14.2. UN proper shipping name

Not applicable

## 14.3. Transport hazard class(es)

Not applicable

## 14.4. Packing group

Not applicable

# 14.5. Environmental hazards

Other information : No supplementary information available.

## 14.6. Special precautions for user

## 14.6.1. Overland transport

No additional information available

#### 14.6.2. Transport by sea

No additional information available

#### 14.6.3. Air transport

No additional information available

## 14.6.4. Inland waterway transport

No additional information available

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

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

## 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

11/05/2015 EN (English) 5/6

# Safety Data Sheet

according to Regulation (EC) No. 453/2010

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No additional information available

## **SECTION 16: Other information**

Other information

: The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

#### Full text of R-, H- and EUH-phrases::

in text of 10,111 and Eo11 philases	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Repr. 2	Reproductive toxicity Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
R22	Harmful if swallowed
R36	Irritating to eyes
R41	Risk of serious damage to eyes
R63	Possible risk of harm to the unborn child
Xi	Irritant
Xn	Harmful

## SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

11/05/2015 EN (English) 6/6