Eurol Brake Fluid DOT 5 Silic

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 02-06-2014 Revision date: 02-06-2014 Supersedes: 02-06-2014 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Product name : Eurol Brake Fluid DOT 5 Silic

Product code : E801550

Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Industrial use,Professional use,Consumer use

Use of the substance/mixture : Brake fluid.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Eurol bv.
Energiestraat 12
7442 DA Nijverdal - The Netherlands
T +31 548 615165
r.hilgers@eurol.com - www.eurol.com

1.4. Emergency telephone number

Emergency number : +31 548 615165
(Monday to Friday: 8:00 - 17:00)

Country	Organisation/Company	Address	Emergency number
GREECE	Poisons Information Centre Children's Hospital "Aglaia. Kyriakou"	11527 Athens	+30 10 779 3777
ICELAND	Iceland Poisons Information Centre Landspitali University Hospital	Fossvogi 108 Reykjavik	+354 525 111 +354 543 2222
IRELAND (REPUBLIC OF)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
ISRAEL	Israel Poisons Information Centre Rambam Medical Centre	PO Box 9602 31096 Haifa	+972 4 854 1900
UNITED KINGDOM	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0870 600 6266 (UK only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols : -

Extra phrases : Safety data sheet available for professional user on request

2.3. Other hazards

Other hazards not contributing to the classification : This product floats on water and may affect the oxygen-balance in the water. The base oil contains less than 3% DMSO-extract measured according IP 346, therefore it is NOT classified as T/R45: May cause cancer" (Note L).". USED ENGINE OILS: Combustion products resulting from the operation of internal combustion engines contaminate engine oils during use. Used engine oil may contain hazardous components which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used engine oil must therefore be

avoided and a high standard of personal hygiene maintained.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Seek medical attention if ill effect develops.

First-aid measures after inhalation : Take victim to fresh air, in a quiet place, in an half laying position and if necessary take medical advice. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. High-pressure injection under skin may cause serious damage. Seek medical attention if ill effect or irritation develops.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Ensure adequate flushing of eyes by separating eyelids with the fingers. Obtain medical attention if pain, blinking, tears or redness persist.

First-aid measures after ingestion : Consult a doctor/medical service if you feel unwell. If vomiting occurs spontaneously, keep head below the hips to prevent aspiration. Do not induce vomiting.

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

Symptoms/injuries after inhalation : At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.

Symptoms/injuries after skin contact : Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis. High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

Symptoms/injuries after eye contact : Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.

Symptoms/injuries after ingestion : Bad taste. Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.

Symptoms/injuries upon intravenous administration : Unknown.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2), dry chemical powder, foam. Water fog.

Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustion generates : CO, CO2, POx, NOx, SOx, H2S.

Explosion hazard : Not expected to be a fire/explosion hazard under normal conditions of use.

5.3. Advice for firefighters

Precautionary measures fire : Do not enter fire area without proper protective equipment, including respiratory protection.

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

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

Other information : Prevent fire-fighting water from entering environment. Sweep up and remove to a suitable, clearly marked container for disposal in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Spill area may be slippery. Prevent soil and water pollution. Prevent entry to sewers and public waters.

6.1.1. For non-emergency personnel

Protective equipment : When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required. Use protective clothing.

Emergency procedures : Consider evacuation.

6.1.2. For emergency responders

Protective equipment	:	When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Emergency procedures	:	No specific measures are necessary.

6.2. Environmental precautions

Dike for recovery or absorb with appropriate material. Notify authorities if product enters sewers or public waters. Prevent soil and water pollution. Prevent liquid from entering sewers, watercourses, underground or low areas. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.3. Methods and material for containment and cleaning up

For containment	:	Large quantities: Contain large spillage with sand or earth.
Methods for cleaning up	:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Take up large spills with pump or vacuum and finish with dry chemical absorbent.
Other information	:	Use suitable disposal containers. Sweep up and remove to a suitable, clearly marked container for disposal in accordance with local regulations. On water, recover/skim from surface and pour out in disposal container.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.
Precautions for safe handling	:	Avoid prolonged and repeated contact with skin. May be dangerously slippery if spilled. Where contact with eyes or skin is likely, wear suitable protection. Do not eat, drink or smoke during use. Remove contaminated clothing and shoes.
Hygiene measures	:	Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Where contact with eyes or skin is likely, wear suitable protection. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Keep container tightly closed and in well ventilated place.
Storage conditions	:	Store in original container.
Incompatible products	:	Reacts vigorously with strong oxidizers and acids.
Maximum storage period	:	5 year
Storage temperature	:	≤ 40 °C
Prohibitions on mixed storage	:	Keep away from : oxidizing materials. strong acids.
Storage area	:	Store at ambient temperature.
Special rules on packaging	:	Keep container tightly closed and dry.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure-value for oil mist	:	10 mg/m3 (15 min.) or 5 mg/m3 (8 hours).

8.2. Exposure controls

Appropriate engineering controls	:	Large quantities: Contain large spillage with sand or earth.
Personal protective equipment	:	Gloves. In case of splash hazard: safety glasses. Eye protection should only be necessary where liquid could be splashed or sprayed.

Materials for protective clothing	:	PVC gloves. Neoprene or nitrile rubber gloves.

Hand protection	:	In case of repeated or prolonged contact wear gloves. The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream). The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties).
Eye protection	:	Eye protection should only be necessary where liquid could be splashed or sprayed.
Skin and body protection	:	No special clothing/skin protection equipment is recommended under normal conditions of use. Avoid repeated or prolonged skin contact. If repeated skin contact or contamination of clothing is likely, protective clothing should be worn. Equipment should conform to EN 166.
Respiratory protection	:	Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment. Respiratory protective equipment must be checked to ensure it fits correctly each time it is worn. Provided an air-filtering/air-purifying respirator is suitable, a filter for particulates can be used for mist or fume. Use filter type P or comparable standard. A combination filter for particles and organic gases and vapours (boiling point >65°C) may be required if vapour or abnormal odour is also present due to high product temperature. Use filter type AP or comparable standard.
Environmental exposure controls	:	See Heading 12. See Heading 6.
Consumer exposure controls	:	PVC gloves. Neoprene or nitrile rubber gloves.
Other information	:	Do not put the product-soaked rags into the pockets of working clothes. Do not use cloths stained with the product to dry hands. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke during use. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Oily. Liquid.
Colour	:	Purple.
Odour	:	characteristic.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	< 0,1
Melting point	:	<= -36 °C
Freezing point	:	No data available
Boiling point	:	> 260 °C
Flash point	:	150
Auto-ignition temperature	:	> 300 °C
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour Pressure 20°C	:	< 0,1 hPa
Relative vapour density at 20 °C	:	> 1 (air=1)
Relative density	:	No data available
Density	:	0,94 - 0,98 kg/l
Solubility	:	insoluble in water.
Log Pow	:	> 3
Viscosity, kinematic @ 20 °C	:	35 - 50 cSt
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	0,6 - 7 vol %

9.2. Other information

VOC content	:	0 %
Other properties	:	Gas/vapour heavier than air at 20'C.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

Moisture. Overheating.

10.5. Incompatible materials

Strong oxidizing agents. strong acids.

10.6. Hazardous decomposition products

CO, CO2, POx, NOx, SOx, H2S.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Toxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the toxicology of similar products.

Irritation : Not classified

Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.

Corrosivity : Not classified

Sensitisation : Not classified

Repeated dose toxicity : Not classified

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Toxicity for reproduction : Not classified (Based on available data, the classification criteria are not met)

Other information : Toxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the toxicology of similar products. Likely route of exposure: ingestion, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Ecology - water : This product floats on water and may affect the oxygen-balance in the water.

12.2. Persistence and degradability

Eurol Brake Fluid DOT 5 Silic	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Eurol Brake Fluid DOT 5 Silic	
Log Pow	> 3
Bioaccumulative potential	This product is not expected to bioaccumulate through food chains in the environment.

12.4. Mobility in soil

Eurol Brake Fluid DOT 5 Silic	
Ecology - soil	Not miscible with water. Spillages may penetrate the soil causing ground water contamination. This product floats on water and may affect the oxygen-balance in the water.

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

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not discharge into drains or the environment.

Additional information : Hazardous waste.

Ecology - waste materials	:	Every mixture with foreign substances such as solvents, brake- and cooling liquids is forbidden. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly. When not empty dispose of this container at hazardous or special waste collection point.
European List of Waste (LoW) code	:	16 01 13* - brake fluids

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	:	Not applicable

IMDG

Transport hazard class(es) (IMDG)	:	Not applicable

IATA

Transport hazard class(es) (IATA)	:	Not applicable

ADN

Transport hazard class(es) (ADN)	:	Not applicable

RID

Transport hazard class(es) (RID)	:	Not applicable

14.4. Packing group

Packing group (UN)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

14.6. Special precautions for user

14.6.1. Overland transport

14.6.2. Transport by sea

14.6.3. Air transport

14.6.4. Inland waterway transport

Not subject to ADN	:	No

14.6.5. Rail transport

Carriage prohibited (RID)	:	No

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

VOC content : 0 %

15.1.2. National regulations

Germany

Water hazard class (WGK) : 1 - slightly hazardous to water

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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