ENOC SUPER BLUE BRAKE AND CLUTCH FLUID

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 26/04/2017 Revision date: 26/04/2017 Version: 1.0

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

1.1. Product identifier

Product form : Mixtures

Product name : **ENOC SUPER BLUE BRAKE AND CLUTCH FLUID**

Product code : 223003

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Hydraulic fluid for use in automotive brake and clutch system

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ENOC Marketing L.L.C

ENOC House I

Dubai - United Arab Emirates

T +971 4 313 4613 - F +971 4 313 4616

1.4. Emergency telephone number

Emergency number : +97143374400
(business hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4	H302
Serious eye damage/eye irritation, Category 1	H318
Reproductive toxicity, Category 2	H361
Specific target organ toxicity — Repeated exposure, Category 2	H373

Full text of H statements : 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) :

GHS05 GHS07 GHS08

Signal word (CLP) : Danger

Hazardous ingredients : -2-[2-(2-butoxyethoxy)ethoxy]ethanol, TEGBE, triethylene glycol monobutyl ether, butoxytriethylene glycol; -2,2' -oxybisethanol, diethylene glycol; -2-(2-methoxyethoxy)ethanol, diethylene glycol monomethyl ether

Hazard statements (CLP) : H302 - Harmful if swallowed
H318 - Causes serious eye damage
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (CLP) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe dust/fume/gas/mist/vapours/spray
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing/eye protection/face protection

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
-2-[2-(2-butoxyethoxy)ethoxy]ethanol, TEGBE, triethylene glycol monobutyl ether, 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
-2,2' -oxybisethanol, diethylene glycol	(CAS-No.) 111-46-6 (EC-No.) 203-872-2 (EC Index-No.) 603-140-00-6 (REACH-no) 01-2119457857-21	10 - 25	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	(CAS-No.) 112-34-5 (EC-No.) 203-961-6 (EC Index-No.) 603-096-00-8	0 - 3	Eye Irrit. 2, H319
-2-(2-methoxyethoxy)ethanol, diethylene glycol monomethyl ether	(CAS-No.) 111-77-3 (EC-No.) 203-906-6 (EC Index-No.) 603-107-00-6 (REACH-no) 01-2119475100-52	0 - 3	Repr. 2, H361d

Specific concentration limits:

Name	Product identifier	Specific concentration limits
-2-[2-(2-butoxyethoxy)ethoxy]ethanol, TEGBE, triethylene glycol monobutyl ether, 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 =<C < 30) Eye Irrit. 2, H319 (C >= 30) Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Wash off immediately with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately and plentifully with water, also under the eyelids, for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately get medical attention.

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

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Injection under the skin of pressurized hydrocarbons can cause severe, permanent tissue damage. May cause skin irritation / dermatitis.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : May result in aspiration into the lungs, causing chemical pneumonia.

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 (CO2), water, dry chemical powder.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : None known.

Explosion hazard : None known.

Hazardous decomposition products in case of fire : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide. Aldehydes. Sulfur oxides.

5.3. Advice for firefighters

Firefighting instructions : Cool down the containers exposed to heat with a water spray.

Protective equipment for firefighters : Wear proper protective equipment. In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protection equipment.

Emergency procedures : Evacuate area. Avoid contact with skin, eyes and clothes.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing. In case of fire: Wear self-contained breathing apparatus.

Emergency procedures : Evacuate and limit access. Stop leak if safe to do so. Use ventilation/water spray/fog to disperse vapours. Do not touch spilled material.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Clean up any spills as soon as possible, using an absorbent material to collect it. For larger spills, dike area and pump into waste containers.

Methods for cleaning up : Collect all waste in suitable and labelled containers and dispose according to local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handling this product may result in electrostatic accumulation. Use proper grounding procedures.

Precautions for safe handling : Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Avoid static electricity discharges. Provide earthing of containers, equipment, pumps and ventilation facilities.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothes. Wash contaminated clothing prior to re-use.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place.

Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

-2,2' -oxybisethanol, diethylene glycol (111-46-6)		
United Kingdom	Local name	2,2'-Oxydiethanol
United Kingdom	WEL TWA (mg/m³)	101 mg/m³
United Kingdom	WEL TWA (ppm)	23 ppm

8.2. Exposure controls

Appropriate engineering controls:

Either local exhaust or general room ventilation is usually required.

Personal protective equipment:

Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.

Materials for protective clothing:

Wear suitable protective clothing. Natural fibres (e.g. cotton)

Hand protection:

Wear suitable gloves tested to EN374. Thickness of glove material: > 0.13 mm. Break through time: ≥ 480 min.

Eye protection:

Use splash goggles when eye contact due to splashing is possible. DIN EN 166

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Wear a respirator conforming to EN140 with Type A/P2 filter or better.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Blue
Odour	:	Characteristics.
Odour threshold	:	No data available
pH	:	7 - 11.5 SAE J 1703
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	< -50 °C SAE J 1703
Freezing point	:	No data available
Boiling point	:	> 205 °C SAE J 1703
Flash point	:	> 93 °C IP 35
Auto-ignition temperature	:	> 300 ASTM D286
Decomposition temperature	:	> 300 °C
Flammability (solid, gas)	:	No data available
Vapour pressure	:	< 2 mbar Reid
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1.01 - 1.06 g/ml @ 20°C DIN 51757
Solubility	:	Soluble in: Water. Ethanol.
Log Pow	:	< 2 OECD 117
Viscosity, kinematic	:	5 - 10 cSt @ 20°C
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive.
Oxidising properties	:	Not oxidizing.
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known under normal conditions of use. No polymerization.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

ATE CLP (oral)	2000.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified
pH: 7 - 11.5 SAE J 1703

Serious eye damage/irritation : Causes serious eye damage.
pH: 7 - 11.5 SAE J 1703

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

ENOC SUPER BRAKE FLUID DOT 3	
Viscosity, kinematic	5 - 10 mm²/s @ 20°C

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

ENOC SUPER BLUE BRAKE AND CLUTCH FLUID	
Log Pow	< 2 OECD 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

Regional legislation (waste) : Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste.

Waste treatment methods : Can be incinerated according to local regulations.

Product/Packaging disposal recommendations : Dispose of this material and its container to hazardous or special waste collection point.

European List of Waste (LoW) code : 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol 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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations : International regulatory information:
AICS: Australia. Inventory of Chemical Substances (AICS) (as amended through 1 September 2015)
CAS RN: 143-22-6
Name: Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-
Molecular formula: C10H22O4
DSL: Canada. Domestic Substances List (DSL), as amended through September 23, 2015
CAS RN: 143-22-6
Name: Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-
Molecular formula: C10H22O4
ENCS: Japan. Inventory of Existing & New Chemical Substances (ENCS), as amended through July 29, 2016
CAS RN: 143-22-6
Name: Ethanol, 2-[-(2-butoxyethoxy)ethoxy]- (en-US)
Japanese ENCS Number: (2)-436
Molecular formula: C10H22O4
CAS RN: 143-22-6, Name: Ethanol, 2-[-(2-butoxyethoxy)ethoxy]- (en-US)
Japanese ENCS Number: (7)-97, Molecular formula: C10H22O4
KECI: Korea. Existing Chemicals Inventory (KECI, January 27, 2015, amended through MoE 2016-138, July 13, 2016)
CAS RN: 143-22-6
Name: 2-[2-(2-Butoxyethoxy)ethoxy]ethanol; Triethylene glycol monobutyl ether
Korean ID Number: KE-04140
Molecular formula: C10H22O4

TSCA: U.S. Federal, TSCA
TSCA Section 8(d) Health & Safety Data Reporting (40 CFR 716, Subpt. B)
CAS RN: 143-22-6
Name: TRIETHYLENEGLYCOL MONOBUTYL ETHER--ETHANOL, 2-[2-(2-BUTOXYETHOXY)ETHOXY]-.
Listed in 40 CFR 716.120: (a)
Effective date: 06/20/85
Sunset date: 06/20/95
TSCA High Production Volume (HPV) Chemicals: 1990, 1994 & Post-1994 Additions (01/20/06)
CAS RN: 143-22-6
Name: ETHANOL, 2-[2-(2-BUTOXYETHOXY)ETHOXY]-
1990 HPV Challenge Program Chemical
HPV Indicator Value (see notes): 2, 4
HPV Sponsorship Value (see notes): I
Notes
2 Chemical is otherwise being handled under the Organisation for Economic Co-operation and Development (OECD) Screening Information Data Sheet (SIDS) Program. This chemical may be sponsored, however.

4 A company or consortium has had confirmed by the International Council of Chemical Associations (ICCA) their sponsorship of this chemical in the HPV Initiative of the ICCA, and all information essentially equivalent to a Full Commitment under the HPV Challenge Program (i.e, chemical name, CAS number, start year for each chemical, technical contact person and telephone) has been provided to the Agency.

. International regulatory information:
AICS: Australia. Inventory of Chemical Substances (AICS) (as amended through 7 March 2017)
CAS RN: 111-46-6
Name: Ethanol, 2,2'-oxybis-
Molecular formula: C4H10O3
DSL: Canada. Domestic Substances List (DSL), as amended through 8 March 2017
CAS RN: 111-46-6
Name: Ethanol, 2,2'-oxybis-
Molecular formula: C4H10O3
ENCS: Japan. Inventory of Existing & New Chemical Substances (ENCS), as amended through July 29, 2016
CAS RN: 111-46-6
Name: Diethylene glycol (en-US)
Japanese ENCS Number: (2)-415
Molecular formula: C4H10O3
Note(s): j2 CAS RN: 111-46-6
Name: Diethylene glycol (en-US)
Japanese ENCS Number: (2)-2979
Molecular formula: C4H10O3
Note(s): j2, CAS RN: 111-46-6
Name: Ethanol, 2,2'-oxybis- (en-US)
Japanese ENCS Number: (2)-415
Molecular formula: C4H10O3, CAS RN: 111-46-6
Name: Ethanol, 2,2'-oxybis- (en-US)
Japanese ENCS Number: (2)-2979
Molecular formula: C4H10O3
Notesj2 ENCS synonym.
KECI: Korea. Existing Chemicals Inventory (KECI, January 27, 2015, amended through MoE 2016-138, July 13, 2016)
CAS RN: 111-46-6

Name: 2,2'-Oxybisethanol
Korean ID Number: KE-27694
Molecular formula: C4H10O3
PICCS: Philippines. Inventory of Chemicals and Chemical Substances (PICCS) 2014
CAS RN: 111-46-6
Name: 2,2'-DIHYDROXYDIETHYL ETHER
TSCA: U.S. Federal, TSCA
TSCA High Production Volume (HPV) Chemicals: 1990, 1994 & Post-1994 Additions (01/20/06)
CAS RN: 111-46-6
Name: ETHANOL, 2,2'-OXYBIS-
1990 HPV Challenge Program Chemical
HPV Indicator Value (see notes): 2, 4 HPV Sponsorship Value (see notes): I Notes 2
Chemical is otherwise being handled under the Organisation for Economic Co-operation and Development (OECD) Screening Information Data Sheet (SIDS) Program. This chemical may be sponsored, however.
4 A company or consortium has had confirmed by the International Council of Chemical Associations (ICCA) their sponsorship of this chemical in the HPV Initiative of the ICCA, and all information essentially equivalent to a Full Commitment under the HPV Challenge Program (i.e, chemical name, CAS number, start year for each chemical, technical contact person and telephone) has been provided to the Agency.
I ICCA Confirmed Commitment Chemical
TSCA Chemical Hazard Information Profiles (CHIPs)
CAS RN: 111-46-6
Name: ETHANOL, 2,2'-OXYBIS-
CAS RN: 111-46-6
Name: DIETHYLENE GLYCOL.

15.1.2. National regulations

Germany

VwVwS Annex reference	:	Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	None of the components are listed
SZW-lijst van mutagene stoffen	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	-2-(2-methoxyethoxy)ethanol, diethylene glycol monomethyl ether is listed

Denmark

Classification remarks	:	Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation	:	Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

A chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Other information	:	It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product. Such information is actually to be best of our knowledge and believes accurate as reliable.

Full text of H- and EUH-statements:

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
H361	Suspected of damaging fertility or the unborn child
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 4 (Oral)	H302	Calculation method
Eye Dam. 1	H318	Calculation method
Repr. 2	H361	Calculation method
STOT RE 2	H373	Calculation method

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