

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.06.2023

Version number 6

Revision: 20.06.2023

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

- **1.1 Product identifier**
- **Trade name:** COREXX Bremsflüssigkeit DOT 4
- **UFI:** KVCE-T0YS-Q00H-4SF4
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** brake fluid
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
CARAT Systementwicklung- und Marketing GmbH & Co. KG
Am Victoria-Turm 2
68163 Mannheim
Germany
- **Further information obtainable from:**
Tel.: +49(0)621/86080-0
Fax : +49(0)621/86080-390
E-Mail: info@carat-gruppe.de
- **1.4 Emergency telephone number:** Tel.: +49 (0) 30 30 686 700 (Giftnotruf Berlin)

SECTION 2: Hazards identification

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



GHS08 health hazard

Repr. 2 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS08

- **Signal word** Warning
- **Hazard-determining components of labelling:**
Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate
- **Hazard statements**
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
- **Precautionary statements**
 - P101 If medical advice is needed, have product container or label at hand.
 - P102 Keep out of reach of children.
 - P103 Read carefully and follow all instructions.
 - P201 Obtain special instructions before use.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P308+P313 IF exposed or concerned: Get medical advice/attention.
 - P405 Store locked up.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**
EUH208
Contains dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction.

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

- **Determination of endocrine-disrupting properties**

The mixture does not contain substances listed for endocrine disrupting properties in accordance with REACH Article 59(1) or has been determined not to contain substances with endocrine disrupting properties in a concentration equal to or greater than 0.1% in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture: consisting of the following components.

- **Dangerous components:**

30989-05-0	Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate ⚠ Repr. 2, H361fd	<30%
111-46-6	2,2'-oxybisethanol ⚠ Acute Tox. 4, H302	<10%
143-22-6	2-[2-(2-butoxyethoxy)ethoxy]ethanol ⚠ Eye Dam. 1, H318 Specific concentration limits: Eye Dam. 1; H318: C ≥ 30 % Eye Irrit. 2; H319: 20 % ≤ C < 30 %	<10%
111-77-3	2-(2-methoxyethoxy)ethanol ⚠ Repr. 1B, H360D Specific concentration limit: Repr. 1B; H360D: C ≥ 3 %	<3%
26544-38-7	dihydro-3-(tetrapropenyl)furan-2,5-dione ⚠ Eye Irrit. 2, H319; Skin Sens. 1A, H317; Aquatic Chronic 4, H413	<0,1%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Take affected persons out of danger area and lay down.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Rinse out mouth and then drink plenty of water.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 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**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.

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· **Additional information**

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

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

Ensure adequate ventilation

Keep away from ignition sources.

· **6.2 Environmental precautions:**

Keep contaminated washing water and dispose of appropriately.

Prevent from spreading (e.g. by damming-in or oil barriers).

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

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

Remove from the water surface (e.g. skim or suck off).

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

Dispose contaminated material as waste according to section 13.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Keep receptacles tightly sealed.

Open and handle receptacle with care.

· **Information about fire - and explosion protection:** Keep respiratory protective device available.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Keep container tightly closed and store in a dry and well-ventilated place.

Store only in the original receptacle.

· **Information about storage in one common storage facility:** Store away from oxidising agents.

· **Further information about storage conditions:**

This product is hygroscopic.

Keep container tightly sealed.

· **Storage class:**

10 - 13 (No further differentiation is made, as there are no there are legal restrictions on joint storage.)

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

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

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

111-46-6 2,2'-oxybisethanol

AGW (Germany)	Long-term value: 44 mg/m ³ , 10 ppm 4(II);DFG, Y, 11
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143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol

MAK (Germany)	als Dampf und Aerosol;vgl.Abschn.IIb und Xc
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111-77-3 2-(2-methoxyethoxy)ethanol

AGW (Germany)	Long-term value: 50 mg/m ³ , 10 ppm EU, Y, H, 11
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- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**



- **General protective and hygienic measures:**
Avoid close or long term contact with the skin.
Clean skin thoroughly immediately after handling the product.
Ensure that washing facilities are available at the work place.
Use skin protection cream for skin protection.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
- **Respiratory protection:** Not required.
- **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
Nitrile rubber, NBR
Butyl rubber, BR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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/face protection** Gauze goggles
- **Body protection:** Impervious protective clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** Amber coloured
- **Odour:** Weak, characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** <-50 °C
- **Boiling point or initial boiling point and boiling range** >230 °C
- **Flammability** Not applicable.

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· Lower and upper explosion limit	
· Upper:	Not determined.
· Flash point:	>100 °C
· Auto-ignition temperature:	>300 °C
· Decomposition temperature:	>300 °C
· pH	7,5-8,5
· Viscosity:	
· Kinematic viscosity at 20 °C	5 c/St
· Dynamic:	Not determined.
· Solubility	
· water:	miscible Alcoholic.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	1,07 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.

· 9.2 Other information	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· Organic solvents:	<13,0 %
· Change in condition	
· Evaporation rate	Not determined.

· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **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** No dangerous reactions known.

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10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not smoke.
For information on safe handling, see section 7.

10.5 Incompatible materials:

Oxidising substances. Strong bases. Strong acids. Aluminium. Sulphuric acid. Perchloric acid. Chlorosulphuric acid.

Sodium hydroxide. For information on safe handling, see section 7.

10.6 Hazardous decomposition products: Possible in traces.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:**30989-05-0 Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate**

Oral	LD50	>2.000 mg/kg (rat)
Dermal	LD50	>2.000 mg/kg (rat)

111-46-6 2,2'-oxybisethanol

Oral	LD50	12.565 mg/kg (rat)
Dermal	LD50	11.890 mg/kg (rabbit)

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

Oral	LD50	5.300 mg/kg (rat)
Dermal	LD50	3.540 mg/kg (rabbit)

111-77-3 2-(2-methoxyethoxy)ethanol

Dermal	LD50	9.404 mg/kg (rabbit)
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26544-38-7 dihydro-3-(tetrapropenyl)furan-2,5-dione

Oral	LD50	2.900 mg/kg (rat)
Dermal	LD50	>2.000 mg/kg (rat)
Inhalative	LC50/4 h	5,3 mg/l (rat)

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

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

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2 Information on other hazards**Endocrine disrupting properties**

The substance is not included in the list due to endocrine disrupting properties according to REACH Article 59(1), or it has been classified in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Commission Regulation (EU) 2018/605 that it has no endocrine disrupting properties. exhibits.

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
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.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue	
16 01 13*	brake fluids

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|-----------------|
| · 14.1 UN number or ID number | |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | |
| Not applicable. | |
| · UN "Model Regulation": | Void |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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 · **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 54

 · **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

 · **REGULATION (EU) 2019/1148**

 · **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

 · **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

 · **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

 · **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

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

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SECTION 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.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H360D May damage the unborn child.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H413 May cause long lasting harmful effects to aquatic life.

 · **Department issuing SDS:** Product safety department

 · **Date of previous version:** 03.04.2023

 · **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1A: Skin sensitisation – Category 1A

Repr. 1B: Reproductive toxicity – Category 1B

Repr. 2: Reproductive toxicity – Category 2

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

 · *** Data compared to the previous version altered.**

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