

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

Creation date 20th May 2022
Revision date Version 1.0

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

- 1.1. Product identifier**
Substance / mixture BIZOL Coolant G11 (-40)
mixture
UFI 98D4-JTM4-700E-HYVF
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
Special engine coolant
Main intended use
PC-TEC-7 Heat transfer fluids
Mixture uses advised against
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Distributor
Name or trade name BIZOL Germany GmbH
Address Martin Buber Str. 12, Berlin, D-14163
Germany
VAT Reg No DE311552841
Phone +49 (0) 30 80 48 69-0
E-mail info@bizol.de
- Competent person responsible for the safety data sheet**
Name BIZOL Germany GmbH
E-mail info@bizol.de
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is classified as dangerous.
Acute Tox. 4, H302
STOT RE 2, H373
Full text of all classifications and hazard statements is given in the section 16.
Most serious adverse physico-chemical effects
Unknown.
Most serious adverse effects on human health and the environment
May cause damage to organs through prolonged or repeated exposure. Harmful if swallowed.

- 2.2. Label elements**
Hazard pictogram



Signal word
Warning

Hazardous substances
ethanediol
Tolyltriazol

Hazard statements
H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.



SAFETY DATA SHEET

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BIZOL Coolant G11 (-40)

Creation date 20th May 2022
Revision date Version 1.0

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P260 Do not breathe Vapour.
P264 Wash hands and exposed parts of the body thoroughly after handling.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container to in accordance with local regulations by handing over to a person authorized to dispose of waste or a site designated by the town.

Requirements for child-resistant fastenings and tactile warning of danger

Container must carry a tactile warning of danger.

2.3. Other hazards

Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

| Identification numbers | Substance name | Content in % weight | Classification according to Regulation (EC) No 1272/2008 | Note |
|---|----------------------|---------------------|---|------|
| Index: 603-027-00-1 CAS: 107-21-1 EC: 203-473-3 | ethanediol | >40 | Acute Tox. 4, H302 STOT RE 2, H373 | 1 |
| Index: 607-230-00-6 CAS: 149-57-5 EC: 205-743-6 | 2-ethylhexanoic acid | <2 | Repr. 2, H361d | |
| CAS: 29385-43-1 | Tolyltriazol | <0,5 | Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 3, H412 | |

Notes

1 Substance with a Union workplace exposure limit.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists. Note: If the product sticks to the skin and cannot be removed using water and cleaning products or edible oil, do not use force and leave for specialized treatment.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible. Note: If the product sticks to the skin and cannot be removed using water and cleaning products or edible oil, do not use force and leave for specialized treatment.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

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Revision date

Version

1.0

If swallowed

Rinse mouth with water, drink about 2dl of water if conscious and seek immediate medical attention.

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

If inhaled

Possible irritation of airways, cough, headache.

If on skin

Not expected.

If in eyes

Not expected.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

Fire produces heavy, black smoke, with potential development of carbon monoxide and dioxide and other toxic gases. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Use gloves in case of prolonged contact. Follow the instructions in the Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. Dispose of the collected material according to the instructions in the section 13. Upon an escape of large quantities of the product, inform the Fire Department and the Environmental Department of the Municipal Authority with the extended scope of competencies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Protect against direct sunlight. Electrostatic charge may be formed during use; use only earthed piping (tubing) when repumping. Use of antistatic clothes and footwear is recommended. Use non-sparking tools. Do not inhale gases and vapours. Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight.



SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

Creation date 20th May 2022
Revision date Version 1.0

Storage class 10 - Other combustible liquids

The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

7.3. Specific end use(s)
not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set. The mixture contains substances for which occupational exposure limits are set.

European Union

EU limits

| Substance name (component) | Type | Value |
|----------------------------|----------------|-----------------------|
| ethanediol (CAS: 107-21-1) | OEL 8 hours | 52 mg/m ³ |
| | OEL 8 hours | 20 ppm |
| | OEL 15 minutes | 104 mg/m ³ |
| | OEL 15 minutes | 40 ppm |

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Use barrier creams for skin protection, they should, however, not be applied once exposure has occurred. Observe other recommendations of the manufacturer. Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant to elevated temperatures. Contaminated skin should be washed thoroughly.

Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

Thermal hazard

not available

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------------------|
| Physical state | liquid |
| Colour | blue, green |
| Odour | data not available |
| Melting point/freezing point | >-30 °C |
| Boiling point or initial boiling point and boiling range | >100 °C |
| Flammability | data not available |
| Lower and upper explosion limit | data not available |
| Flash point | >110 °C |
| Auto-ignition temperature | data not available |
| Decomposition temperature | data not available |
| pH | 7-9 (undiluted) |
| Kinematic viscosity | 1-2 mm ² /s at 40 °C |
| Solubility in water | data not available |



SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

Creation date 20th May 2022
Revision date Version 1.0

Partition coefficient n-octanol/water (log value) <2,0
Vapour pressure data not available
Density and/or relative density
Density 1,10-1,16 g/cm³ at 20 °C
Form liquid

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The mixture is flammable.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

The product is stable under normal conditions.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents. Thereby a dangerous exothermic reaction will be prevented.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide, heavy smoke and nitrogen oxides are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

Acute toxicity

Harmful if swallowed.
ethanediol

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex | Source |
|-------------------|------------------|------------|------------------|-------------------------|-----|---------------------------------------|
| Oral | LD ₅₀ | 5840 mg/kg | | Rat | | Sicherheitsdatenblatt vom Lieferanten |
| Dermal | LD ₅₀ | 9530 mg/kg | | Rat | | Sicherheitsdatenblatt vom Lieferanten |
| Inhalation | LC ₅₀ | 2.5 g/l | 6 hour | Rat (Rattus norvegicus) | F/M | Sicherheitsdatenblatt vom Lieferanten |
| Oral | LD ₅₀ | 5840 mg/kg | | Rat | | Sicherheitsdatenblatt vom Lieferanten |
| Dermal | LD ₅₀ | 9530 mg/kg | | Rat | | Sicherheitsdatenblatt vom Lieferanten |



SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

Creation date

20th May 2022

Revision date

Version

1.0

Tolyltriazol

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex | Source |
|--------------------|------------------|------------|------------------|-------------------------|-----|--------------|
| Oral | LD ₅₀ | 675 mg/kg | | Rat (Rattus norvegicus) | F/M | BL dodavatel |
| Inhalation (vapor) | LC ₅₀ | 1.73 mg/kg | | Rat (Rattus norvegicus) | F/M | BL dodavatel |

Skin corrosion/irritation

Based on available data the classification criteria are not met.
ethanediol

| Route of exposure | Result | Time of exposure | Species | Source |
|-------------------|-----------|------------------|--|---------------------------------------|
| Dermal | No effect | | Guinea-pig (Cavia aperea f. porcellus) | Sicherheitsdatenblatt vom Lieferanten |

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.
ethanediol

| Result | Time of exposure | Specific target organ | Species | Sex | Source |
|----------|------------------|-----------------------|---------|-----|---------------------------------------|
| Negative | | | | | Sicherheitsdatenblatt vom Lieferanten |

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

not available

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

ethanediol

| Parameter | Value | Time of exposure | Species | Environment | Source |
|------------------|--------------------|------------------|---------|-------------|---------------------------------------|
| LC ₅₀ | 18000 - 46000 mg/l | 96 hour | Fishes | | Sicherheitsdatenblatt vom Lieferanten |
| IC ₅₀ | >100 mg/l | 72 hour | Algae | | Sicherheitsdatenblatt vom Lieferanten |

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

Creation date 20th May 2022 Version 1.0
 Revision date

ethanediol

| Parameter | Value | Time of exposure | Species | Environment | Source |
|------------------|--------------------|------------------|-------------------------------|-------------|---------------------------------------|
| EC ₅₀ | >100 mg/l | 96 hour | Invertebrates (Daphnia magna) | | Sicherheitsdatenblatt vom Lieferanten |
| LC ₅₀ | 18000 - 46000 mg/l | 96 hour | Fishes | | Sicherheitsdatenblatt vom Lieferanten |
| IC ₅₀ | >100 mg/l | 72 hour | Algae | | Sicherheitsdatenblatt vom Lieferanten |

Chronic toxicity

ethanediol

| Parameter | Value | Time of exposure | Species | Environment | Source |
|-----------|------------|------------------|------------------------------------|-------------|---------------------------------------|
| NOEC | 15380 mg/l | 72 day | Fishes (Oncorhynchus mykiss) | | Sicherheitsdatenblatt vom Lieferanten |
| NOEC | 8590 mg/l | 72 day | Invertebrates (Ceriodaphnia dubia) | | Sicherheitsdatenblatt vom Lieferanten |

12.2. Persistence and degradability

Biodegradability

ethanediol

| Parameter | Method | Value | Time of exposure | Environment | Result | Source |
|-----------|-----------|-------|------------------|-------------|----------------------|---------------------------------------|
| | OECD 301A | >90 % | 10 day | | Easily biodegradable | Sicherheitsdatenblatt vom Lieferanten |

The substance is not biodegradable.

12.3. Bioaccumulative potential

Insignificant.

12.4. Mobility in soil

The product is soluble and mobile in water and soil. Contamination of water courses may occur in the event of rain.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

not available

12.7. Other adverse effects

not available

SECTION 13: Disposal considerations



SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

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Revision date Version 1.0

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P260 Do not breathe Vapour.
P264 Wash hands and exposed parts of the body thoroughly after handling.
P314 Get medical advice/attention if you feel unwell.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

| | | | |
|---------------|---------------|---------|-----|
| Creation date | 20th May 2022 | Version | 1.0 |
| Revision date | | | |

P501 Dispose of contents/container to in accordance with local regulations by handing over to a person authorized to dispose of waste or a site designated by the town.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

| | |
|---------------------|---|
| ADR | European agreement concerning the international carriage of dangerous goods by road |
| BCF | Bioconcentration Factor |
| CAS | Chemical Abstracts Service |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures |
| EC ₅₀ | Concentration of a substance when it is affected 50% of the population |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| EmS | Emergency plan |
| ES | Identification code for each substance listed in EINECS |
| EU | European Union |
| EuPCS | European Product Categorisation System |
| IATA | International Air Transport Association |
| IBC | International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals |
| IC ₅₀ | Concentration causing 50% blockade |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| INCI | International Nomenclature of Cosmetic Ingredients |
| ISO | International Organization for Standardization |
| IUPAC | International Union of Pure and Applied Chemistry |
| LC ₅₀ | Lethal concentration of a substance in which it can be expected death of 50% of the population |
| LD ₅₀ | Lethal dose of a substance in which it can be expected death of 50% of the population |
| log K _{ow} | Octanol-water partition coefficient |
| MARPOL | International Convention for the Prevention of Pollution from Ships |
| NOEC | No observed effect concentration |
| OEL | Occupational Exposure Limits |
| PBT | Persistent, Bioaccumulative and Toxic |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Agreement on the transport of dangerous goods by rail |
| UN | Four-figure identification number of the substance or article taken from the UN Model Regulations |
| UVCB | Substances of unknown or variable composition, complex reaction products or biological materials |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and very Bioaccumulative |

| | |
|-----------------|--|
| Acute Tox. | Acute toxicity |
| Aquatic Chronic | Hazardous to the aquatic environment (chronic) |
| Eye Irrit. | Eye irritation |
| Repr. | Reproductive toxicity |
| STOT RE | Specific target organ toxicity - repeated exposure |

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available



SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

BIZOL Coolant G11 (-40)

| | | | |
|---------------|---------------|---------|-----|
| Creation date | 20th May 2022 | Version | 1.0 |
| Revision date | | | |

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.

