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**Bizol Coolant Asia**

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

**1.1. Product identifier**

Bizol Coolant Asia

**Further trade names**

UFI: 7R10-40QD-K00W-2SR7

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

**Use of the substance/mixture**

Antifreeze agent

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

Company name:	BIZOL Germany GmbH	
Street:	Martin-Buber-Str. 12	
Place:	D-14163 Berlin	
Telephone:	+49 (30) 804 869-0	Telefax: +49 (30) 804 869-2860
e-mail:	support@bizol.de	
Internet:	www.bizol.com	

**1.4. Emergency telephone number:**

Germany: +49 (30) 804 869-0 (08.00-17.00, Mo-Fr)  
In England and Wales: NHS Direct: 0845 4647 or 111 In Scotland: NHS 24 -  
08454 24 24 24 In Republic of Ireland: 01 809 2166

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**GB CLP Regulation**

Acute Tox. 4; H302  
STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

**2.2. Label elements**

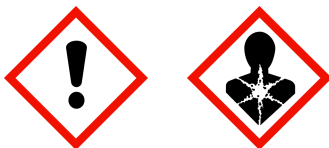
**GB CLP Regulation**

**Hazard components for labelling**

ethanediol  
2,2'-oxybisethanol

**Signal word:** Warning

**Pictograms:**



**Hazard statements**

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

**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 thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

**2.3. Other hazards**

No further relevant information available.

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### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Glycol-based mixture.

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
107-21-1	ethanediol			70 - 90 %
	203-473-3	603-027-00-1	01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373			
111-46-6	2,2' -oxybisethanol			< 1,5 %
	203-872-2	603-140-00-6	01-2119457857-21	
	Acute Tox. 4, STOT RE 2; H302 H373			
1310-58-3	potassium hydroxide			< 0,45 %
	215-181-3	019-002-00-8	01-2119487136-33	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A, Eye Dam. 1; H290 H302 H314 H318			
7664-38-2	phosphoric acid			< 0,45 %
	231-633-2	015-011-00-6	01-2119485924-24	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H290 H302 H314 H318			

Full text of H and EUH statements: see section 16.

##### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
107-21-1	203-473-3	ethanediol	70 - 90 %
		dermal: LD50 = 10600 mg/kg; oral: ATE = 500 mg/kg	
111-46-6	203-872-2	2,2' -oxybisethanol	< 1,5 %
		dermal: LD50 = 11890 mg/kg; oral: ATE = 500 mg/kg	
1310-58-3	215-181-3	potassium hydroxide	< 0,45 %
		oral: ATE = 500 mg/kg Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 Eye Irrit. 2; H319: >= 0,5 - < 2	
7664-38-2	231-633-2	phosphoric acid	< 0,45 %
		oral: ATE = 500 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25	

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

When in doubt or if symptoms are observed, get medical advice. If unconscious but breathing normally, place in recovery position and seek medical advice. Remove contaminated, saturated clothing immediately.

##### After inhalation

Remove casualty to fresh air and keep warm and at rest.

##### After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

##### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

##### After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution

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effect). Call a physician immediately. Do NOT induce vomiting.

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

When in doubt or if symptoms are observed, get medical advice.

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

No information available.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media**

Full water jet.

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

Hazardous decomposition products: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). Do not inhale explosion and combustion gases.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not allow to enter into soil/subsoil.

**SECTION 6: Accidental release measures**

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

**General advice**

Protective measures: see section 7 + 8.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Clean contaminated articles and floor according to the environmental legislation.

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

**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Protective measures: see section 7 + 8.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Use personal protection equipment. Do not eat, drink or smoke when using this product. Provide fresh air. Handle and open container with care. Conditions to avoid: generation/formation of aerosols.

**Advice on protection against fire and explosion**

No special measures are necessary.

**Advice on general occupational hygiene**

When using do not eat, drink, smoke, sniff.

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

**Requirements for storage rooms and vessels**

Protect against: Frost. Keep away from heat. Protect from direct sunlight. Keep container tightly closed in a cool, well-ventilated place.

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

Observe technical data sheet.

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

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### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
111-46-6	2,2'-Oxydiethanol	23	101		TWA (8 h)	WEL
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	WEL

#### DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
107-21-1	ethanediol			
Worker DNEL, long-term		inhalation	local	35 mg/m³
Consumer DNEL, long-term		inhalation	local	7 mg/m³
Consumer DNEL, long-term		dermal	systemic	53 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	106 mg/kg bw/day
111-46-6	2,2' -oxybisethanol			
Worker DNEL, long-term		dermal	systemic	106 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	53 mg/kg bw/day
Worker DNEL, long-term		inhalation	local	60 mg/m³
Consumer DNEL, long-term		inhalation	local	12 mg/m³
1310-58-3	potassium hydroxide			
Worker DNEL, long-term		inhalation	local	1 mg/m³
Consumer DNEL, long-term		inhalation	local	1 mg/m³
7664-38-2	phosphoric acid			
Worker DNEL, long-term		inhalation	local	1 mg/m³
Worker DNEL, long-term		dermal	systemic	10,7 mg/kg bw/day
Worker DNEL, acute		inhalation	local	2 mg/m³
Consumer DNEL, long-term		oral	systemic	0,1 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	4,57 mg/m³

#### PNEC values

CAS No	Substance	Value
107-21-1	ethanediol	
Freshwater		10 mg/l
Marine water		1 mg/l
Freshwater sediment		20,9 mg/kg
Micro-organisms in sewage treatment plants (STP)		199,5 mg/l
Soil		1,53 mg/kg
111-46-6	2,2' -oxybisethanol	
Freshwater		10 mg/l
Marine water		1 mg/l
Freshwater sediment		20,9 mg/kg
Soil		1,53 mg/kg

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**Additional advice on limit values**

- a no restriction
- b End of exposure or end of shift
- c at long-term exposure:
- d before next shift

Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

Z: A risk of reproductive effects cannot to be excluded if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

blood (B)

Urine (U)

**8.2. Exposure controls**

**Appropriate engineering controls**

See section 7. No additional measures necessary.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Eye glasses with side protection.

**Hand protection**

Wear suitable gloves. Recommended glove articles: EN ISO 374. Suitable material: NBR (Nitrile rubber).

Breakthrough time: > 480 min (Thickness of the glove material: 0.4 mm). Breakthrough times and swelling properties of the material must be taken into consideration. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

**Skin protection**

Protective clothing.

**Respiratory protection**

With correct and proper use, and under normal conditions, breathing protection is not required. When splashes or fine mist form, a permitted breathing apparatus suitable for these purposes must be used. Suitable respiratory protection apparatus: Filtering Half-face mask (EN 149), e.g. FFA P / FFP3.

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	green
Odour:	characteristic
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	150 - 173 °C
Flammability	
Solid/liquid:	No data available
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	111 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	No data available
pH-Value:	7,0 - 9,0
Viscosity / kinematic: (at 25 °C)	18 mm <sup>2</sup> /s
Water solubility:	completely miscible
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	1,13 g/cm <sup>3</sup>

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Relative vapour density: not determined  
Particle characteristics: not applicable

### 9.2. Other information

#### Other safety characteristics

Pour point: not determined  
Viscosity / dynamic: not determined  
Flow time: not determined

No further relevant information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

No information available.

### 10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

### 10.4. Conditions to avoid

Heat.

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

No information available.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in GB CLP Regulation

#### Acute toxicity

Harmful if swallowed.

#### ATEmix calculated

ATE (oral) 1693,5 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol				
	oral	ATE 500 mg/kg			
	dermal	LD50 10600 mg/kg	Rabbit	GESTIS	
111-46-6	2,2' -oxybisethanol				
	oral	ATE 500 mg/kg			
	dermal	LD50 11890 mg/kg	Rabbit		
1310-58-3	potassium hydroxide				
	oral	ATE 500 mg/kg			
7664-38-2	phosphoric acid				
	oral	ATE 500 mg/kg			

#### Irritation and corrosivity

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

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### Sensitising effects

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

### Carcinogenic/mutagenic/toxic effects for reproduction

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

### STOT-single exposure

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

### STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (ethanediol)

### Aspiration hazard

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

## 11.2. Information on other hazards

### Other information

Keeping to the general worker's protection rules and the industrial hygienics, there is no risk in handling this product through the personnel.

## SECTION 12: Ecological information

### 12.1. Toxicity

There are no data available on the mixture itself.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
111-46-6	2,2' -oxybisethanol					
	Acute fish toxicity	LC50 mg/l	> 32000	96 h	Gambusia affinis	
7664-38-2	phosphoric acid					
	Acute fish toxicity	LC50	138 mg/l	96 h	Gambusia affinis	

### 12.2. Persistence and degradability

There are no data available on the mixture itself.

### 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol	-1,36
111-46-6	2,2' -oxybisethanol	-1,98 (25°C)

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste.

#### List of Wastes Code - residues/unused products

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160114 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08); antifreeze fluids containing hazardous substances; hazardous waste

### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

### Contaminated packaging

Non-contaminated packages may be recycled. Consult the appropriate local waste disposal expert about waste disposal.

## SECTION 14: Transport information

### Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine pollutant:

NO

### Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

No data available

### 14.7. Maritime transport in bulk according to IMO instruments

No data available

## SECTION 15: Regulatory information

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

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2010/75/EU (VOC): 0 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

#### National regulatory information

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

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### Changes

This data sheet contains changes from the previous version in section(s): 1,2,7,9,11,15.



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**Abbreviations and acronyms**

ADR: Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations concerning the International Carriage of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
CAS: Chemical Abstracts Service (a division of the American Chemical Society)  
DNEL/DMEL: Derived No-Effect Level / Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
WEL (UK): Workplace Exposure Limits  
TWA (EC): Time-Weighted Average  
STEL (EC): Short Term Exposure Limit  
ATE: Acute Toxicity Estimate  
LD50: Lethal Dose, 50% (median lethal dose)  
LC50: Lethal Concentration, 50% (median lethal concentration)  
EC50: half maximal Effective Concentration  
ErC50: EC50 in terms of reduction of growth rate  
AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
STOT RE 2; H373	Calculation method

**Relevant H and EUH statements (number and full text)**

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H373	May cause damage to kidneys through prolonged or repeated exposure if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.

**Further Information**

Safety Data Sheet according to COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006

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The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*