

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Kühlflüssigkeit HKF 30.1 MW 65

Revision date: 21.02.2019

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

1.1. Product identifier

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

Use of the substance/mixture

Coolant
Industrial uses

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	Conzelmann Schweißhandelsgesellschaft mbH	
Street:	Von-Roggensteinstrasse 5	
Place:	D-89358 Kammeltal-Wettenhausen	
Telephone:	+49 (0) 8222 413880	Telefax: +49 (0) 8222 41388-20
e-mail:	office@conzelmann-gmbh.de	
Contact person:	main office	Telephone: +49 (0) 8222 413880
e-mail:	office@conzelmann-gmbh.de	

1.4. Emergency telephone number: +49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Acute toxicity: Acute Tox. 4
Serious eye damage/eye irritation: Eye Irrit. 2
Specific target organ toxicity - repeated exposure: STOT RE 2
Hazard Statements:
Harmful if swallowed.
Causes serious eye irritation.
May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

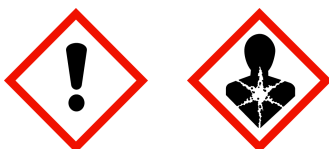
Regulation (EC) No. 1272/2008

Hazard components for labelling

ethanediol, ethylene glycol

Signal word: Warning

Pictograms:



Hazard statements

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.

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P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards

No other hazards are known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Ingredient:

ethanediol, ethylene glycol

propan-1-ol; n-propanol,

Water,

Inhibitor

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
107-21-1	ethanediol, ethylene glycol			35-45 %
	203-473-3	603-027-00-1	01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373			
71-23-8	propan-1-ol; n-propanol			2-4 %
	200-746-9	603-003-00-0	01-2119486761-29	
	Flam. Liq. 2, Eye Dam. 1, STOT SE 3; H225 H318 H336			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing.

If unconscious place in recovery position and seek medical advice.

If breathing is irregular or stopped, administer artificial respiration.

After contact with skin

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

Remove contaminated, saturated clothing immediately.

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.

Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain

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immediate medical attention. Let water be drunken in little sips (dilution effect).
Do NOT induce vomiting.

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

No information available.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry extinguishing powder, alcohol resistant foam, Carbon dioxide (CO₂), Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Carbon monoxide Carbon dioxide (CO₂) Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Special protective equipment for firefighters Protective clothing. Full protection suit

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.

Dispose of waste according to applicable legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

Wear personal protection equipment (refer to section 8).

Provide adequate ventilation.

Do not breathe gas/vapour/aerosol.

Avoid contact with eyes and skin.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

Shafts and sewers must be protected from entry of the product.

6.3. Methods and material for containment and cleaning up

Provide fresh air.

Absorb with liquid-binding material (e.g. 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

See protective measures under point 7 and 8.

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

See section 8.

Wear personal protection equipment (refer to section 8).

Do not breathe gas/vapour/aerosol.

Keep container tightly closed.

In case of inadequate ventilation wear respiratory protection.

Avoid contact with eyes and skin.

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Advice on protection against fire and explosion

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharges.

Further information on handling

Use only in well-ventilated areas.
When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.
Keep/Store only in original container.
Keep away from heat.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep away from: Frost, Heat, Humidity

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL
71-23-8	Propan-1-ol	200	500		TWA (8 h)	WEL
		250	625		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
107-21-1	ethanediol, ethylene glycol			
	Worker DNEL, long-term	inhalation	local	35 mg/m ³
	Worker DNEL, long-term	dermal	systemic	106 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	local	7 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	53 mg/kg bw/day
71-23-8	propan-1-ol; n-propanol			
	Worker DNEL, long-term	inhalation	systemic	268 mg/m ³
	Worker DNEL, acute	inhalation	systemic	1723 mg/m ³
	Worker DNEL, long-term	dermal	systemic	136 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	systemic	80 mg/m ³
	Consumer DNEL, acute	inhalation	systemic	1036 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	81 mg/kg bw/day
	Consumer DNEL, long-term	oral	systemic	61 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
107-21-1	ethanediol, ethylene glycol	
Freshwater		10 mg/l
Freshwater (intermittent releases)		10 mg/l
Marine water		1 mg/l
Freshwater sediment		37 mg/kg
Marine sediment		3,7 mg/kg
Micro-organisms in sewage treatment plants (STP)		199,5 mg/l
Soil		1,53 mg/kg
71-23-8	propan-1-ol; n-propanol	
Freshwater		10 mg/l
Freshwater (intermittent releases)		10 mg/l
Marine water		1 mg/l
Freshwater sediment		22,8 mg/kg
Marine sediment		2,28 mg/kg
Micro-organisms in sewage treatment plants (STP)		96 mg/l
Soil		2,2 mg/kg

8.2. Exposure controls

Appropriate engineering controls

- Provide adequate ventilation as well as local exhaustion at critical locations.
- Ground and bond container and receiving equipment.
- Carry out filling operations only at stations with exhaust ventilation facilities.
- Make available sufficient washing facilities

Protective and hygiene measures

- Work in well-ventilated zones or use proper respiratory protection.
- Only wear fitting, comfortable and clean protective clothing.
- Avoid contact with skin, eyes and clothes.
- Wash hands before breaks and after work.
- Take off contaminated clothing and wash it before reuse.
- When using do not eat, drink, smoke, sniff.
- Apply skin care products after work.

Eye/face protection

- Eye glasses with side protection,
goggles

Hand protection

- Tested protective gloves must be worn: DIN EN 374
- NBR (Nitrile rubber) NR (natural rubber, natural latex) Butyl caoutchouc (butyl rubber)
- Thickness of the glove material $\geq 0,4$ 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.
- Wearing time with occasional contact (splashes): max. 480 min. (NBR (Nitrile rubber))
- Wearing time with permanent contact 240 - 480 min (NBR (Nitrile rubber))
- Observe the wear time limits as specified by the manufacturer. Wear cotton undermitten if possible.
- Check leak tightness/impermeability prior to use.

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Skin protection

- Wear suitable protective clothing.
- Wear anti-static footwear and clothing
- Street clothing should be stored separately from work clothing.
- Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection

- If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
- Suitable respiratory protection apparatus: Full-/half-/quarter-face masks (DIN EN 136/140) ABEK-P3

Environmental exposure controls

- No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless
Odour:	characteristic
pH-Value:	9,0-10,5

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	~ 100 °C
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Solidifying point:	~ -30 °C
Flash point:	~92 °C

Flammability

- Solid: No information available.
- Gas: No information available.

Explosive properties

- not explosive.

Lower explosion limits:	No information available.
Upper explosion limits:	No information available.
Ignition temperature:	No information available.

Auto-ignition temperature

- Solid: No information available.
- Gas: No information available.

Decomposition temperature:	No information available.
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Oxidizing properties

- No information available.

Vapour pressure:	not determined
Density:	1,032 g/cm ³
Water solubility:	completely miscible

Solubility in other solvents

- No information available.

Partition coefficient:	No information available.
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Viscosity / dynamic: not determined
Vapour density: No information available.
Evaporation rate: No information available.
Solvent separation test: No information available.

9.2. Other information

Solid content: <1%
freezing point: -26,5 °C
protection against cold: -28 °C
Conductivity: 15-30 µS/cm

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Reacts with: Oxidising agent, strong

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

10.5. Incompatible materials

Oxidising agent, strong

10.6. Hazardous decomposition products

Carbon dioxide, Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1190,5 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol, ethylene glycol				
	oral	LD50 mg/kg	7712	Rat	Study report (1968) according to BASF-internal standards
	dermal	LD50 mg/kg	> 3500	Mouse	Fundamental and Applied Toxicology 27: 1 LD50 derived from developmental toxicity
71-23-8	propan-1-ol; n-propanol				
	oral	LD50 mg/kg	ca. 8000	Rat	Study report (1975) OECD Guideline 401
	dermal	LD50 mg/kg	4032	Rabbit	Arch. ind. hyg. occupat. med. 10, 61-68. OECD Guideline 402

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Irritation and corrosivity

Causes serious eye irritation.

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

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, ethylene glycol)

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested. Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
107-21-1	ethanediol, ethylene glycol					
	Acute fish toxicity	LC50 > 72860 mg/l	96 h	Pimephales promelas	Environ. Toxicology and Chemistry, Vol.	EPA 600/4-90/027. U.S. Environmental Pro
	Acute algae toxicity	ErC50 6500 - 13000 mg/l	96 h	Pseudokirchneriella subcapitata	Study report (1982)	other: EPA 600/9-78-018, 1978
	Acute crustacea toxicity	EC50 > 100 mg/l	48 h	Daphnia magna	Study report (1998)	OECD Guideline 202
	Fish toxicity	NOEC 15380 mg/l	7 d	Pimephales promelas	Environ. Toxicology and Chemistry, Vol.	other: EPA 600/4-89/001. U.S. Environmen
	Algea toxicity	NOEC > 100 mg/l	8 d	Scenedesmus quadricauda	REACH Registration Dossier	OECD Guideline 201
	Crustacea toxicity	NOEC 7500 - 15000 mg/l	21 d	Daphnia magna	REACH Registration Dossier	other: ASTM
71-23-8	propan-1-ol; n-propanol					
	Acute fish toxicity	LC50 4555 mg/l	96 h	Pimephales promelas	Vol. 1, pp 3, 5-16, 65-68. Center for La	OECD Guideline 203
	Acute crustacea toxicity	EC50 3644 mg/l	48 h	Daphnia magna	Water Res 23: 495-499 (1989)	other: DIN 38412 Part 11, Daphnia-Short
	Crustacea toxicity	NOEC > 100 mg/l	21 d	Daphnia magna	Study report (1997)	OECD Guideline 211

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

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No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol, ethylene glycol	-1,36
71-23-8	propan-1-ol; n-propanol	1,6

BCF

CAS No	Chemical name	BCF	Species	Source
71-23-8	propan-1-ol; n-propanol	0,88		Unpublished calculat

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
hazardous waste

Contaminated packaging

Completely emptied packages can be recycled.
Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

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14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

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: ethanediol, ethylene glycol; propan-1-ol; n-propanol

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

ethanediol, ethylene glycol

propan-1-ol; n-propanol

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

(Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EC50: Effectice concentration, 50 percent

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Eye Irrit. 2; H319	Calculation method
STOT RE 2; H373	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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