

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

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

1.1. Product identifier

Trade name/designation:

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

Use of the substance/mixture:

water-miscible metalworking fluid

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Curtis Systems GmbH

Geheimrat-Hummel-Platz Nr. 4

65239 Hochheim

Germany

Telephone: 0614690738-0

Telefax: 061469073845

E-mail: info@curtis-systems.de

E-mail (competent person): weimer@curtis-systems.de

1.4. Emergency telephone number

Technical department: 06146-90738-33 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	

2.2. Label elements

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

Hazard pictograms:



GHS07

Exclamation mark

Signal word: Warning

Hazard components for labelling:

1,2-benzisothiazol-3(2H)-one

hazard statements for health hazards	
H317	May cause an allergic skin reaction.

Supplemental Hazard information (EU): -

Precautionary statements Prevention	
P272	Contaminated work clothing should not be allowed out of the workplace.
P280.1	Wear face protection.

Precautionary statements Response	
P302 + P352	IF ON SKIN: Wash with plenty of water/...
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

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Precautionary statements Disposal

P501.2 Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards

Other adverse effects:

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Description:

Mixture of corrosion inhibitors and additives in aqueous solution.

Additional information:

Substance with a common (EC) occupational exposure limit value. See section 8.

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CL P]	Concentration
CAS No.: 105-59-9 EC No.: 203-312-7 REACH No.: 01-2119488970-24-0000	2,2'-methyliminodiethanol Eye Irrit. 2 Warning H319	< 3 Wt %
CAS No.: 2634-33-5 EC No.: 220-120-9	1,2-benzisothiazol-3(2H)-one Eye Dam. 1, Acute Tox. 4, Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1 Danger H302-H315-H317-H318-H400	< 0.5 Wt %

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Change contaminated, saturated clothing.

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

Following inhalation:

Following inhalation - Provide fresh air.

In case of respiratory tract irritation, consult a physician.

In case of skin contact:

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

In case of skin irritation, consult a physician.

After eye contact:

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion:

Let water be drunken in little sips (dilution effect).

Do NOT induce vomiting.

Call a physician immediately.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Suitable extinguishing media Sand alcohol resistant foam Extinguishing powder Dry extinguishing powder

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Unsuitable extinguishing media:

Full water jet

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

5.3. Advice for firefighters

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

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Use personal protection equipment.
Special danger of slipping by leaking/spilling product.
Avoid contact with skin, eyes and clothes.

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

For containment:

Cover drains.
Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

For cleaning up:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Collect in closed containers for disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

6.5. Additional information

No data available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

All work processes must always be designed so that the following is as low as possible: Inhalation Skin contact Eye contact
Always close containers tightly after the removal of product.

Fire prevent measures:

Usual measures for fire prevention.

Environmental precautions:

Shafts and sewers must be protected from entry of the product.
Provide for retaining containers, eg. floor pan without outflow.

Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff.
Wash hands before breaks and after work.
Do not put any product-impregnated cleaning rags into your trouser pockets.

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7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

- Keep container tightly closed.
- Keep/Store only in original container.

Hints on storage assembly:

- Materials to avoid: Oxidising agent

Storage class: 12 - non-combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

- Further information on storage conditions Protect against: Heat Frost
- Recommended storage temperature 15-25 °C
- storage stability max. 1 year.

7.3. Specific end use(s)

Recommendation:

- Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

- No data available

8.1.2. Biological limit values

- No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
2,2'-methyliminodiethanol CAS No.: 105-59-9	26 mg/m ³	① DNEL worker ② DNEL long-term inhalative (systemic)
2,2'-methyliminodiethanol CAS No.: 105-59-9	19 mg/kg bw/day	① DNEL worker ② DNEL long-term dermal (systemic)

Substance name	PNEC Value	① PNEC type
2,2'-methyliminodiethanol CAS No.: 105-59-9	0.1 mg/l	① PNEC aquatic, freshwater
2,2'-methyliminodiethanol CAS No.: 105-59-9	0.0125 mg/l	① PNEC aquatic, marine water
2,2'-methyliminodiethanol CAS No.: 105-59-9	1 mg/l	① PNEC aquatic, intermittent release
2,2'-methyliminodiethanol CAS No.: 105-59-9	0.89 mg/kg	① PNEC sediment, freshwater
2,2'-methyliminodiethanol CAS No.: 105-59-9	10 mg/l	① PNEC sewage treatment plant (STP)

8.2. Exposure controls

8.2.1. Appropriate engineering controls

- Technical measures and the application of suitable work processes have priority over personal protection equipment.

8.2.2. Personal protection equipment



Eye/face protection:

- Tightly sealed safety glasses.

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Skin protection:

Hand protection: Tested protective gloves must be worn - In case of prolonged or frequently repeated skin contact:

Suitable material: Suitable material: NBR (Nitrile rubber) Butyl caoutchouc (butyl rubber)

Thickness of the glove material: 0,7 mm

Breakthrough time (maximum wearing time): > 480

Respiratory protection:

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at: exceeding exposure limit values, insufficient ventilation, aerosol or mist formation

Other protection measures:

Draw up and observe skin protection programme.

Before starting work, apply water-resistant skincare preparations.

Do not put any product-impregnated cleaning rags into your trouser pockets.

Avoid contact with skin, eyes and clothes.

8.2.3. Environmental exposure controls

No data available

8.3. Additional information

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: yellow

Odour: characteristic

Safety relevant basis data

parameter		at °C	Method	Remark
pH	8.8 - 9	20 °C		
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	> 100 °C			
Decomposition temperature (°C):	<i>not determined</i>			
Flash point	<i>not applicable</i>		DIN EN ISO 2592	
Evaporation rate	<i>not determined</i>			
Ignition temperature in °C	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Relative density	1.097 g/cm ³	20 °C	DIN EN ISO 12185	
Bulk density	<i>not determined</i>			
Water solubility	completely miscible			
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	<i>not determined</i>	20 °C		

9.2. Other information

No data available

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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

No hazardous reactions known.
see 10.1

10.4. Conditions to avoid

Protect against: Heat Frost

10.5. Incompatible materials

Materials to avoid Oxidising agent Acid

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

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

Acute dermal toxicity:

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

Acute inhalation toxicity:

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

Skin corrosion/irritation:

There are no data available on the preparation/mixture itself.
slightly irritant but not relevant for classification.
The statement is derived from the properties of the single components.

Serious eye damage/irritation:

slightly irritant but not relevant for classification.
The statement is derived from the properties of the single components.

Respiratory or skin sensitisation:

There are no data available on the preparation/mixture itself.
May cause an allergic skin reaction.
The statement is derived from the properties of the single components.

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:

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:

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

Aspiration hazard:

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

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:

There are no data available on the mixture itself.
The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

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Assessment/classification:

harmless to aquatic organisms up to the tested concentration

12.2. Persistence and degradability

Biodegradation:

Part of the components is biodegradable.

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

There are no data available on the mixture itself.

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 data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product:

12 01 09 *	machining emulsions and solutions free of halogens
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*: Evidence for disposal must be provided.

Waste treatment options

Appropriate disposal / Product:

Dispose of waste according to applicable legislation.

Appropriate disposal / Package:

Dispose of waste according to applicable legislation. Delivery to an approved waste disposal company. Non-contaminated packages may be recycled.

13.2. Additional information

No data available

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

14.1. UN-No.

not relevant

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

not relevant

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not relevant

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SECTION 15: Regulatory information

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

15.1.1. EU legislation

No data available

15.1.2. National regulations

 [DE] National regulations

Störfallverordnung

Remark:

-

Water hazard class (WGK)

WGK:

1 - schwach wassergefährdend

Source:

Self-classification (mixture; calculation rule).

15.2. Chemical Safety Assessment

No information available.

15.3. Additional information

No data available

SECTION 16: Other information

16.1. Indication of changes

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16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

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

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation (<i>Skin Sens. 1</i>)	H317: May cause an allergic skin reaction.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.

16.6. Training advice

No data available

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16.7. Additional information

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.