

Trade name: Hardener S for cds-Mortar 0-1 FB

Version: 2.0 / EN

Date revised 09.12.2022

Substance number: 11403

Replaces Version: 1.0 / EN

Print date: 12.12.2022

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

1.1. Product identifier

Hardener S for cds-Mortar 0-1 FB

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

Use of the substance/preparation

coating material

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

cds Polymere GmbH & Co. KG
 Gau-Bickelheimer Str. 72
 55576 Sprendlingen/Rhh.
 Telephone no. +49(6701) 9350-0
 Fax no. +49(6701) 9350-50

1.4. Emergency telephone number

cds-Labor / Tel. +49 (67 01) 93 50-28 (This number is reachable monday to friday from 8 am to 5 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H302
Skin Corr. 1	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
Aquatic Chronic 3	H412

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains Benzylalcohol; 3-Aminomethyl-3,5,5-trimethylcyclohexylamin; Benzylidimethylamin

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients**Hazardous ingredients****3-Aminomethyl-3,5,5-trimethylcyclohexylamin**

CAS No. 2855-13-2
 EINECS no. 220-666-8
 Registration no. 01-2119514687-32-XXXX
 Concentration >= 25 < 50 %
 Classification (Regulation (EC) No. 1272/2008)
 Acute Tox. 4 H302
 Skin Corr. 1B H314
 Eye Dam. 1 H318
 Skin Sens. 1A H317

Benzylalcohol

CAS No. 100-51-6
 EINECS no. 202-859-9
 Registration no. 01-2119492630-38-XXXX
 Concentration >= 25 < 50 %
 Classification (Regulation (EC) No. 1272/2008)
 Acute Tox. 4 H302
 Acute Tox. 4 H332

Benzylidimethylamin

CAS No. 103-83-3
 EINECS no. 203-149-1
 Registration no. 01-2119529232-48-XXXX
 Concentration >= 3 < 5 %
 Classification (Regulation (EC) No. 1272/2008)
 Flam. Liq. 3 H226
 Acute Tox. 4 H302
 Acute Tox. 4 H312
 Acute Tox. 4 H332
 Skin Corr. 1B H314
 Aquatic Chronic 3 H412

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Remove contaminated, soaked clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid. Clean body thoroughly (bath, shower). In any case show the physician the Safety Data Sheet.

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After inhalation

Ensure supply of fresh air. Remove affected person from danger area. Seek medical advice immediately.

After skin contact

Wash off immediately with soap and water. Seek medical advice immediately.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Take medical treatment.

After ingestion

Call in a physician immediately and show him the Safety Data Sheet. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

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

Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry powder

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus. Wear full protective suit.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Observe manufacturer's / distributor's instructions.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use breathing apparatus if exposed to vapours/dust/aerosol. Avoid contact with skin, eyes and clothing. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

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Pick up with absorbent material. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Containers in which spilt substance has been collected must be adequately labelled. Dispose of absorbed material in accordance with the regulations.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid formation of aerosols. Perform filling operations only at stations with exhaust ventilation facilities. Provide suitable exhaust ventilation at the processing machines. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Provide solvent-resistant and impermeable floor.

Hints on storage assembly

Do not store together with foodstuffs.

Storage classes

Storage class according to TRGS 510 8A Combustible corrosive hazardous substances

Further information on storage conditions

Do not keep at temperatures above 20 °C.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Benzyl alcohol

List	TRGS 900		
Type	AGW		
Value	22	mg/m ³	5 ppm(V)

Maximum limit value: 2(l); Skin resorption / sensibilisation: H; Pregnancy group: Y; Status: 07.06.2018; Remarks: DFG, H, Y, 11

Other information

Contains no substances with occupational exposure limit values.

Derived No/Minimal Effect Levels (DNEL/DMEL)

Benzylalcohol

Reference substance	Benzylalcohol	
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	8	mg/kg

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term

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Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	22	mg/m ³

Type of value	Benzylalcohol	
Reference group	Derived No Effect Level (DNEL)	
Duration of exposure	Worker	
Route of exposure	Acute	
Mode of action	inhalative	
Concentration	Systemic effects	110 mg/m ³

Type of value	Benzylalcohol	
Reference group	Derived No Effect Level (DNEL)	
Duration of exposure	Worker	
Route of exposure	Acute	
Mode of action	dermal	
Concentration	Systemic effects	40 mg/kg

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	inhalative	
Concentration		0,073 mg/m ³

Predicted No Effect Concentration (PNEC)

Benzylalcohol

Type of value	PNEC	
Type	Water	
Concentration	1	mg/l

Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	2,31	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	0,1	mg/l

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	39	mg/l

Type of value	Benzylalcohol	
Type	PNEC	
Concentration	Freshwater sediment	5,27 mg/kg

Type of value	Benzylalcohol	
Type	PNEC	
Concentration	Marine sediment	0,527 mg/kg

Type of value	Benzylalcohol	
	PNEC	

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Type	Soil		
Concentration		0,456	mg/kg

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Type of value	PNEC		
Type	Freshwater		
Concentration		0,06	mg/l

Type of value	PNEC		
Type	Marine		
Concentration		0,006	mg/l

8.2. Exposure controls**General protective and hygiene measures**

Hold emergency shower available. Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Storage of foodstuffs in work rooms is forbidden. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn.

Hand protection

Chemical resistant gloves
Appropriate Material neoprene

Eye protection

Safety glasses with side protection shield; Face shield

Body protection

Clothing as usual in the chemical industry. Protective shoes

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Form	liquid
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Odour threshold

Remarks	not determined
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pH value

Remarks	not determined
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Melting point

Remarks	not determined
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Freezing point

Remarks	not determined
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Initial boiling point and boiling range

Value	200		°C
Pressure	1013	hPa	

Flash point

Value	100		°C
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Evaporation rate (ether = 1) :

Remarks	not determined
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Flammability (solid, gas)

not determined

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Upper/lower flammability or explosive limits

Remarks not determined

Vapour pressure

Remarks not determined

Vapour density

Remarks not determined

Density

Value	1,02		g/cm ³
Temperature	23	°C	

Solubility in water

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient: n-octanol/water

Remarks not determined

Ignition temperature

Remarks not determined

Decomposition temperature

Remarks not determined

Viscosity**dynamic**

Value	25		mPa.s
Temperature	25	°C	

Explosive properties

evaluation not determined

Oxidising properties

Remarks not determined

9.2. Other information**Other information**

None known

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

No hazardous reactions known.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No hazardous reactions known.

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Toxic gases/vapours, Irritant gases/vapours

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

ATE	1.163,36	mg/kg
	45	
Method	calculated value (Regulation (EC) No. 1272/2008)	
Remarks	The classification criteria are met.	

Acute oral toxicity (Components)

Benzylalcohol

Species	mouse	
LD50	1040	mg/kg

Benzylalcohol

Species	rat	
LD50	1620	mg/kg

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Species	rat	
LD50	1030	mg/kg

Acute dermal toxicity

ATE	> 10.000	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	
Remarks	Based on available data, the classification criteria are not met.	

Acute dermal toxicity (Components)

Benzylalcohol

Species	rabbit	
LD50	> 2000	mg/kg

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Species	Rats (male/female)	
LD50	> 2000	mg/kg

Acute inhalational toxicity

ATE	21,5729	mg/l
Administration/Form	Vapors	
Method	calculated value (Regulation (EC) No. 1272/2008)	
ATE	6,9751	mg/l
Administration/Form	Dust/Mist	
Method	calculated value (Regulation (EC) No. 1272/2008)	
Remarks	Based on available data, the classification criteria are not met.	

Acute inhalative toxicity (Components)

Benzylalcohol

Reference substance	Benzylalcohol	
Species	rat	
LC50	> 4,178	mg/l
Duration of exposure	4	h
Administration/Form	Dust/Mist	
Method	OECD 403	

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Species	rat	
LC50	> 5,01	mg/l
Duration of exposure	4	h
Administration/Form	Dust/Mist	

Skin corrosion/irritation

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evaluation corrosive
Remarks The classification criteria are met.

Skin corrosion/irritation (Components)**3-Aminomethyl-3,5,5-trimethylcyclohexylamin**

evaluation strongly corrosive

Serious eye damage/irritation

evaluation corrosive
Remarks The classification criteria are met.

Serious eye damage/irritation (Components)**3-Aminomethyl-3,5,5-trimethylcyclohexylamin**

evaluation corrosive

Sensitization

evaluation May cause sensitization by skin contact.
Remarks The classification criteria are met.

Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)**Single exposure**

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

Repeated exposure

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

Aspiration hazard

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

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

Other information

No toxicological data are available.

SECTION 12: Ecological information**12.1. Toxicity****General information**

not determined

Fish toxicity (Components)**Benzylalcohol**

Species	Fathead minnow (<i>Pimephales promelas</i>)		
LC50	460		mg/l
Duration of exposure	96	h	

Benzylalcohol

Species	golden orfe (<i>Leuciscus idus</i>)		
LC50	645		mg/l
Duration of exposure	96	h	

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3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Species	golden orfe (<i>Leuciscus idus</i>)		
LC50	110		mg/l
Duration of exposure	96	h	
Method	OECD 203		

Daphnia toxicity (Components)**Benzylalcohol**

Species	<i>Daphnia magna</i>		
EC50	230		mg/l
Duration of exposure	48	h	

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Species	<i>Daphnia magna</i>		
EC50	23		mg/l
Duration of exposure	48	h	
Method	OECD 202		

Algae toxicity (Components)**Benzylalcohol**

Species	<i>Pseudokirchneriella subcapitata</i>		
IC50	770		mg/l
Duration of exposure	72	h	

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Species	<i>Scenedesmus subspicatus</i>		
EbC50	37		mg/l
Duration of exposure	72	h	

Bacteria toxicity (Components)**Benzylalcohol**

Species	<i>Pseudomonas putida</i>		
EC10	> 658		mg/l
Duration of exposure	16	h	

Benzylalcohol

Species	<i>Pseudomonas putida</i>		
EC50	390		mg/l
Duration of exposure	24	h	

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Species	<i>Pseudomonas putida</i>		
EC10	1120		mg/l
Duration of exposure	18	h	

12.2. Persistence and degradability**General information**

not determined

12.3. Bioaccumulative potential**General information**

not determined

Partition coefficient: n-octanol/water

Remarks not determined

Octanol/water partition coefficient (log Pow) (Components)**3-Aminomethyl-3,5,5-trimethylcyclohexylamin**

log Pow 0,79

12.4. Mobility in soil

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General information

not determined

Mobility in soil (Components)

3-Aminomethyl-3,5,5-trimethylcyclohexylamin

Moderately mobile in soils

12.5. Results of PBT and vPvB assessment

General information

not determined

12.6. Other adverse effects

General information

not determined

General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: Transport information

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	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	E		
14.1. UN number	2735	2735	2735
14.2. UN proper shipping name	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-Aminomethyl-3,5,5-trimethylcyclohexylamin, Benzylidimethylamin)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-Aminomethyl-3,5,5-trimethylcyclohexylamin, Benzylidimethylamin)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-Aminomethyl-3,5,5-trimethylcyclohexylamin, Benzylidimethylamin)
14.3. Transport hazard class(es)	8	8	8
Label			
14.4. Packing group	III	III	III
Limited Quantity	5 l		
Transport category	3		

SECTION 15: Regulatory information

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

Water Hazard Class (Germany)

Water Hazard Class (Germany) WGK 2

VOC

VOC (EU) 50,99 % 520,1 g/l

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3



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Eye Dam. 1	Serious eye damage, Category 1
Flam. Liq. 3	Flammable liquid, Category 3
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Sens. 1A	Skin sensitization, Category 1A

Information about Safety Data Sheets Preparers

Oliver Nickel, o.nickel@cds-polymere.de

Supplemental information

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.