

Material Safety Data Sheet

according to Regulation (EC) 1907/2006



Product name : Hardener S for cds-Adhesive
Revision : 29.08.2017
Print date : 01.09.2017

Version (Revision) : 7.0.0 (6.0.1)

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Hardener S for cds-Adhesive
Bulk (C498999901)

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

No Information available

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier : cds Polymere GmbH u. Co. KG
Street/P.O.Box : Gau-Bickelheimer Straße 72
Country code/Postal code/Town/City : 55576 Sprendlingen/Rhh.
Telephone : +49 (6701) 9350-0
Telefax : +49 (6701) 9350-50
Contact : siehe Kapitel 16 / see chapter 16 / Voir le chapitre 16

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)

2. Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008 (GHS)

Causes severe skin burns and eye damage. · Harmful if swallowed or in contact with skin. · May cause an allergic skin reaction. · Toxic to aquatic life with long lasting effects.

Aquatic Chronic 2 ; H411 · Skin Corr. 1B ; H314 · Skin Sens. 1 ; H317

2.2 Label elements

Regulation (EC) No 1272/2008 (GHS)

Hazard pictograms



Corrosion (GHS05) · Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Danger

Hazard-determining components of labelling

Fettsäuren, Tallöl-, Reaktionsprodukte m. Tetraethylenpentamin ; CAS-No. : 68953-36-6

TETRAETHYLEN-PENTAMINE ; CAS-No. : 112-57-2

PHENOL, STYROLISIERT ; CAS-No. : 61788-44-1

3-AMINOPROPYLTRIETHOXYSILANE ; CAS-No. : 919-30-2

2-PIPERAZIN-1-YLETHYLAMINE ; CAS-No. : 140-31-8

Hazard statements

H314 Causes severe skin burns and eye damage.

H302/312 Harmful if swallowed or in contact with skin.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

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P280	Wear protective gloves/protective clothing/eye protection/face protection.
P333/313	If skin irritation or rash occurs: Get medical advice/attention.
P337/313	If eye irritation persists: Get medical advice/attention.
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302/352	IF ON SKIN: Wash with plenty of soap and water.
P501	Dispose of contents/container to licensed disposal contractor and according to official state regulations.

2.3 Other hazards

None.

3. Composition/information on ingredients

3.2 Mixtures

Hazardous components

Fettsäuren,Tallöl-,Reaktionsprodukte m. Tetraethylenpentamin ; Registration number (EC) : 01-2119487006-38 ; EC-No. : 273-201-6; CAS-No. : 68953-36-6

Percentage : 55 - 60 %
Classification 1272/2008 (GHS) : Skin Corr. 1C ; H314 Skin Sens. 1 ; H317 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

TETRAETHYLENEMPENTAMINE ; Registration number (EC) : 01-2119487290-37 ; EC-No. : 203-986-2; CAS-No. : 112-57-2

Percentage : 20 - 25 %
Classification 1272/2008 (GHS) : Skin Corr. 1B ; H314 Acute Tox. 4 ; H302/312 Skin Sens. 1 ; H317 Aquatic Chronic 2 ; H411

PHENOL , STYROLISIERT ; Registration number (EC) : 01-2119980970-27-xxxx ; EC-No. : 262-975-0; CAS-No. : 61788-44-1

Percentage : 10 - 15 %
Classification 1272/2008 (GHS) : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Aquatic Chronic 2 ; H411

3-AMINOPROPYLTRIETHOXSILANE ; Registration number (EC) : 01-2119480479-24 ; EC-No. : 213-048-4; CAS-No. : 919-30-2

Percentage : 5 - 10 %
Classification 1272/2008 (GHS) : Skin Corr. 1B ; H314 Acute Tox. 4 ; H302 Skin Sens. 1 ; H317

2-PIPERAZIN-1-YLETHYLAMINE ; Registration number (EC) : 01-2119471486-30-xxxx ; EC-No. : 205-411-0; CAS-No. : 140-31-8

Percentage : 5 - 10 %
Classification 1272/2008 (GHS) : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302/312 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

For the wording of the listed risk phrases refer to section 16.

4. First aid measures

4.1 Description of first aid measures

General

Immediately remove all contaminated clothing.

After inhalation

Take the casualty into the fresh air and keep warm. Keep at rest. Call a doctor, should the air passages be affected.
Unconsciousness: lateral position - call a physician.

After skin contact

Flush away with water and rinse. After first aid treatment immediately seek medical advice.

After eye contact

Remove contact lenses, keep eyelids open. Flush with plenty of water (10 - 15 min.). Call a physician.

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After ingestion

Do not induce vomiting - call a physician.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

None.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Alcohol resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media

Waterjet.

5.2 Special hazards arising from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

When extinguishing fires, use breathing apparatus with an independent source of air.

5.4 Additional information

Do not allow the quenching water into the sewage system.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide for sufficient ventilation. Do not inhale the vapour. Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

Take up with a liquid absorbing material and proceed according to the waste disposal regulations.

6.4 Reference to other sections

None.

7. Handling and storage

Normal precautions taken when handling chemicals should be observed.

7.1 Precautions for safe handling

Information for safe handling

Avoid contact with skin and eyes. Containers to be opened and handled with care. Do not inhale the vapour. Do not eat or drink during work - no smoking. Comply with the health and safety at work laws.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and containers

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Information about separation of incompatible products

Store the foodstuffs separately.

Further information about storage conditions

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Containers should be kept dry and sealed. Observe recommended storage temperature.

7.3 Specific end use(s)

None.

8. Exposure controls/personal protection

8.1 Control parameters

None.

8.2 Exposure controls

Personal protective equipment

General protective and hygiene measures

Keep away from food, drink and animal feeding stuff. Immediately remove all contaminated clothing. Wash hands before breaks and after work. Normal precautions taken when handling chemicals should be observed.

Respiratory protection

If workplace limits are exceeded, a gas mask approved for this purpose must be worn. Filter A/P2

Hand protection

Use protective gloves. Plastic Gloves. Only use chemical-protective gloves with CE-labelling of category III. To minimize the wetness in the glove due to perspiration changing of gloves during a shift is required. Check the permeability prior to each renewed use of the glove. Preventive skin protection by use of skin-protecting agents is recommended. Material of gloves : Nitril rubber (NBR) , Fluorocarbon rubber (Viton) . Recommended thickness of the material: $\geq 0,5$ mm . The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection

Use tightly fitting safety glasses.

Body protection

protective clothing.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Image

Form : Liquid.
Colour : Light yellowish.
Odour : Like amine.

Relevant safety data

Melting point / melting range :			No data available
Boiling temperature / boiling range :	(1013 hPa)	>	200 °C
Decomposition temperature :			No data available
Flash point :		>	100 °C
Flammable solids :			Not applicable.
Flammable gases :			Not applicable.
Oxidising liquids :			No data available.
Lower explosion limit :			No data available
Upper explosion limit :			No data available
Explosive properties :			No data available.
Vapour pressure :	(50 °C)	<	1 hPa
Density :	(23 °C)		1 g/cm ³
Water solubility :	(20 °C)		No data available
pH value :			No data available
log P O/W :			No data available

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Flow time :	(23 °C)	50 - 100	s	ISO cup 6 mm
Viscosity :	(20 °C)	No data available		
Odour threshold :		No data available		
Relative vapour density :	(20 °C)	No data available		
Vapourisation rate :		No data available		

9.2 Other information

None.

10. Stability and reactivity

10.1 Reactivity

There are no data available on the product itself.

10.2 Chemical stability

There are no data available on the product itself.

10.3 Possibility of hazardous reactions

There are no data available on the product itself.

10.4 Conditions to avoid

None, if handled according to order.

10.5 Incompatible materials

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

11. Toxicological information

11.1 Information on toxicological effects

LD50/LC50 values that are relevant for classification

Specification :	LD50 (TETRAETHYLENEMPENTAMINE ; CAS-No. : 112-57-2)
Routes of entry :	Oral
Test species :	Rat
Value / dosage :	3990 mg/kg
Specification :	LD50 (TETRAETHYLENEMPENTAMINE ; CAS-No. : 112-57-2)
Routes of entry :	Dermal
Test species :	Rabbit
Value / dosage :	660 mg/kg
Specification :	LD50 (2-PIPERAZIN-1-YLETHYLAMINE ; CAS-No. : 140-31-8)
Routes of entry :	Oral
Test species :	Rat
Value / dosage :	1470 - 2140 mg/kg
Specification :	LD50 (2-PIPERAZIN-1-YLETHYLAMINE ; CAS-No. : 140-31-8)
Routes of entry :	Dermal
Test species :	Rabbit
Value / dosage :	866 - 1260 mg/kg

Primary irritant effect

Impact on the skin: burning, Impact on the eyes: burning

11.2 Experience on practice

The product causes skin corrosions, and it causes serious damage to eyes. In case of contact with the product: danger of resorption through the skin, irritation of skin/mucous membranes. The product has sensitizing effects. In case of swallowing: even minor quantities may lead to considerable damage to health. Prolonged inhalation of vapours in high concentrations may

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lead to headache, giddiness and nausea.

12. Ecological information

12.1 Toxicity

Aquatic toxicity

Specification : EC50 (TETRAETHYLENEPENTAMINE ; CAS-No. : 112-57-2)

Parameters : Daphnia
Spezies: Daphnia magna Strauß 1820

Value / dosage : 14,6 mg/l

Test-period : 48 h

Specification : EC50 (2-PIPERAZIN-1-YLETHYLAMINE ; CAS-No. : 140-31-8)

Parameters : Daphnia
Spezies: Daphnia magna Strauß 1820

Value / dosage : 32 mg/l

Test-period : 48 h

12.2 Persistence and degradability

There are no data available on the product itself.

12.3 Bioaccumulative potential

There are no data available on the product itself.

12.4 Mobility in soil

There are no data available on the product itself.

12.5 Results of PBT and vPvB assessment

There are no data available on the product itself.

12.6 Other adverse effects

There are no data available on the product itself.

12.7 Additional information

Do not empty into waters or drains.

13. Disposal considerations

In accordance with local official regulations. Remove in accordance with regulations.

13.1 Waste treatment methods

Waste key

Waste code (91/689/EEC) : 08 01 11

14. Transport information

14.1 UN number

2735

14.2 UN proper shipping name

ADR/RID

POLYAMINE, LIQUID, CORROSIVE, N.O.S. (TETRAETHYLENEPENTAMINE · 3-AMINOPROPYLTRIETHOXYSILANE)

IMDG-Code

POLYAMINE, LIQUID, CORROSIVE, N.O.S. (TETRAETHYLENEPENTAMINE · 3-AMINOPROPYLTRIETHOXYSILANE)

ICAO-TI / IATA-DGR

POLYAMINE, LIQUID, CORROSIVE, N.O.S. (TETRAETHYLENEPENTAMINE · 3-AMINOPROPYLTRIETHOXYSILANE)

14.3 Transport hazard class(es)

ADR/RID

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Class : 8
Classification-Code : C7
Kemlercode : 80
Tunnel restriction code : E
Special provisions : E 1
Label : 8
IMDG-Code
Class : 8
EmS number : F-A / S-B
Special provisions : LQ 5 I · E 1 · +
Label : 8
ICAO-TI / IATA-DGR
Class : 8
Special provisions : E 1
Label : 8

14.4 Packing group

III

14.5 Environmental hazards

ADR/RID : -

IMDG-Code : -

ICAO-TI / IATA-DGR : -

14.6 Special precautions for user

None.

15. Regulatory information

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

None.

15.2 Chemical safety assessment

There are no data available on the product itself.

16. Other information

Further information

GHS Hazard statements of components

H302	Harmful if swallowed.
H302/312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Department issuing data sheet

cds-Labor

Contact

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These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
