

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

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

1.1. Product identifier

Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

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

Information provided by / telephone info@cds-polymere.de

1.4. Emergency telephone number

Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

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. 1B	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
Repr. 2	H361fd
STOT SE 3	H335
STOT RE 1	H372
Asp. Tox. 1	H304
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

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

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
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	2-piperazin-1-ylethylamine; Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols; amines, coco alkyl; (Z)-octadec-9-enylamine; benzyl alcohol; 2,2,4-Trimethylhexane-1,6-diamine; Urethane Prepolymer; Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol
----------	---

2.3. Other hazards

No special hazards have to be mentioned.

The product contains no PBT substances. The product contains substances meeting the vPvB criteria. See SECTION 3 in this safety data sheet. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous ingredients****Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols**

EINECS no.	701-443-9				
Registration no.	01-2119980970-27-XXXX				
Concentration	>= 25	<	50	%	
Classification (Regulation (EC) No. 1272/2008)					
	Skin Irrit. 2				H315
	Skin Sens. 1A				H317
	Aquatic Chronic 2				H411

(Z)-octadec-9-enylamine

CAS No.	112-90-3				
EINECS no.	204-015-5				
Registration no.	01-2119473797-19-XXXX				
Concentration	>= 25	<	50	%	
Classification (Regulation (EC) No. 1272/2008)					
	Acute Tox. 4				H302
	Asp. Tox. 1				H304
	Skin Corr. 1B				H314
	STOT SE 3				H335
	STOT RE 2				H373

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1 M = 10

Aquatic Chronic 1 M = 10

ATE oral 1.200 mg/kg

2-piperazin-1-ylethylamine

CAS No. 140-31-8

EINECS no. 205-411-0

Registration no. 01-2119471486-30-XXXX

Concentration ≥ 10 < 25 %

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

Acute Tox. 3 H311

Repr. 2 H361

STOT RE 1 H372

Skin Corr. 1B H314

Eye Dam. 1 H318

Acute Tox. 4 H302

Skin Sens. 1 H317

Aquatic Chronic 3 H412

ATE dermal 866 mg/kg

Urethane PrepolymerConcentration ≥ 10 < 25 %

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

Acute Tox. 4 H302

cATpE oral 500 mg/kg

benzyl alcohol

CAS No. 100-51-6

EINECS no. 202-859-9

Registration no. 01-2119492630-38-XXXX

Concentration ≥ 1 < 10 %

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

Acute Tox. 4 H302

Acute Tox. 4 H332

ATE oral 1.620 mg/kg

cATpE inhalative, Dust/Mist 1,5 mg/l

cATpE inhalative, Vapors 11 mg/l

amines, coco alkyl

CAS No. 61788-46-3

EINECS no. 262-977-1

Registration no. 01-2119473798-17-XXXX

Concentration ≥ 3 < 5 %

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

Acute Tox. 4 H302

Asp. Tox. 1 H304

Skin Corr. 1B H314

STOT SE 3 H335

STOT RE 2 H373

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1 M = 10

Aquatic Chronic 1 M = 10

ATE oral 1.240 mg/kg

2,2,4-Trimethylhexane-1,6-diamine

CAS No. 25513-64-8

EINECS no. 247-063-2

Registration no. 01-2119560598-25-XXXX

Concentration ≥ 1 < 3 %

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

Skin Corr. 1A H314

Acute Tox. 4 H302

Skin Sens. 1A H317

Eye Dam. 1 H318

ATE oral 910 mg/kg

2,4,6-tris(dimethylaminomethyl)phenol

CAS No. 90-72-2

EINECS no. 202-013-9

Registration no. 01-2119560597-27-XXXX

Concentration ≥ 1 < 3 %

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

Acute Tox. 4 H302

Skin Irrit. 2 H315

Eye Irrit. 2 H319

4-methylpentan-2-one

CAS No. 108-10-1

EINECS no. 203-550-1

Registration no. 01-2119473980-30-XXXX

Concentration $\geq 0,1$ < 1 %

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

Flam. Liq. 2 H225

Eye Irrit. 2 H319

Acute Tox. 4 H332

STOT SE 3 H336

Carc. 2 H351

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

EINECS no. 700-960-7

Registration no. 01-2119555274-38-XXXX

Concentration $\geq 0,1$ < 1 %

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

Skin Irrit. 2 H315

Skin Sens. 1 H317

Aquatic Chronic 3 H412

Supplemental information

The substance is contained in the Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

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.

After inhalation

Ensure supply of fresh air. Remove affected person from danger area. Seek medical advice immediately. Give a Cortison spray at an early stage.

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. Carbon monoxide (CO); Carbon dioxide (CO₂); Pyrolysis products

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

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

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

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.

Further information on storage conditions

Do not keep at temperatures above 20 °C.

7.3. Specific end use(s)

Read attached instructions before use.

SECTION 8: Exposure controls/personal protection *****8.1. Control parameters****Other information**

Abbreviations: E = respirable part, A = alveoli absorbable part
There are not known any further control parameters.

Derived No/Minimal Effect Levels (DNEL/DMEL)**benzyl alcohol**

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

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	22	mg/m ³

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

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

2-piperazin-1-ylethylamine

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	10,6	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	10,6	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	0,015	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	0,08	mg/m ³

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	3,33	mg/kg/d

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	20	mg/kg/d

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

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	2,87	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	1,21	mg/m ³

amines, coco alkyl

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,38	mg/m ³

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	dermal	
Concentration	3,5	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	inhalative	
Concentration	1,4	mg/kg

2,4,6-tris(dimethylaminomethyl)phenol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,53	mg/m ³

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	0,15	mg/kg/d

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	2,1	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,6	mg/kg/d

(Z)-octadec-9-enylamine

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,38	mg/m ³

4-methylpentan-2-one

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	83	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	208	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	83	mg/l

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	208	mg/m ³

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	11,8	mg/kg/d

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Predicted No Effect Concentration (PNEC)**benzyl alcohol**

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	PNEC	
Type	Freshwater sediment	
Concentration	5,27	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,527	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,456	mg/kg

2-piperazin-1-ylethylamine

Type of value	PNEC	
Type	Freshwater	
Concentration	0,058	mg/l
Type of value	PNEC	
Type	Marine	
Concentration	0,0058	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,58	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	250	mg/l
Type of value	PNEC	
Type	Sediment	
Concentration	215	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	21,5	mg/kg

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Type of value	PNEC		
Type	Soil		
Concentration	1		mg/kg

2,2,4-Trimethylhexane-1,6-diamine

Type of value	PNEC		
Type	Freshwater		
Concentration	0,102		mg/l

Type of value	PNEC		
Type	Marine		
Concentration	0,01		mg/l

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Type of value	PNEC		
Type	Freshwater		
Concentration	0,0115		mg/l

Type of value	PNEC		
Type	Marine		
Concentration	0,00115		mg/l

amines, coco alkyl

Type of value	PNEC		
Type	Freshwater		
Concentration	0,00026		mg/l

Type of value	PNEC		
Type	Marine		
Concentration	0,000026		mg/l

Type of value	PNEC		
Type	Sewage treatment plant (STP)		
Concentration	0,55		mg/l

Type of value	PNEC		
Type	Freshwater sediment		
Concentration	0,1794		mg/kg

Type of value	PNEC		
Type	Marine sediment		
Concentration	0,01794		mg/kg

Type of value	PNEC		
Type	Soil		
Concentration	10		mg/kg

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Type of value	PNEC		
Type	Freshwater		
Concentration	0,014		mg/l

Type of value	PNEC		
Type	Marine		
Concentration	0,0014		mg/l

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,14	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	2,4	mg/l
Type of value	PNEC	
Type	Soil	
Concentration	212	mg/kg
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	1064	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	106	mg/kg

2,4,6-tris(dimethylaminomethyl)phenol

Type of value	PNEC	
Type	Water	
Concentration	0,046	mg/l
Type of value	PNEC	
Type	Marine	
Concentration	0,0046	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,46	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	0,2	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,262	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,026	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,025	mg/kg

(Z)-octadec-9-enylamine

Type of value	PNEC	
Type	Freshwater	
Concentration	0,00026	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,000026	mg/l

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	0,55	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,1794	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,01794	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	10	mg/kg

4-methylpentan-2-one

Type of value	PNEC	
Type	Freshwater	
Concentration	0,6	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,06	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	27,5	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	8,27	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,83	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	1,3	mg/kg

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. Short term: filter apparatus, combination filter A-P2; The respiratory protection must comply with the relevant CEN standards.

Hand protection

Chemical resistant gloves
Appropriate Material nitrile

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Material thickness $\geq$ 0,3 mmBreakthrough time $\geq$ 480 min

Hand protection must comply with EN 374.

Check leak-tightness/impermeability prior to use.

Eye protection

Safety glasses with side protection shield; Face shield; Eye protection must comply with EN 166.

Body protection

Clothing as usual in the chemical industry. Protective shoes; Personal protective clothing must comply with the relevant CEN standards.

SECTION 9: Physical and chemical properties *****9.1. Information on basic physical and chemical properties****Physical state** liquid**Odour** characteristic**Colour** yellow**Melting point**

Remarks not determined

Freezing point

Remarks not determined

Boiling point or initial boiling point and boiling range

Remarks not determined

Flammability

evaluation not determined

Upper and lower explosive limits

Remarks not determined

Flash pointValue $>$ 100 °C**Ignition temperature**

Remarks not determined

Decomposition temperature

Remarks not determined

pH valueValue 11 to 12
Concentration/H₂O 1 %**Viscosity**

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Vapour pressure

Remarks not determined

Density and/or relative densityValue 0,98 g/cm³
Temperature 23 °C**Relative vapour density**

Remarks not determined

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

9.2. Other information**Odour threshold**

Remarks not determined

Evaporation rate (ether = 1) :

Remarks not determined

Solubility in water

Remarks not determined

Explosive properties

evaluation not determined

Oxidising properties

Remarks not determined

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

Reactions with strong oxidising agents. Reactions with strong acids. Reactions with strong alkalies.

10.6. Hazardous decomposition products

Toxic gases/vapours, Irritant gases/vapours

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

ATE 1.981,22 mg/kg

62

Method calculated value (Regulation (EC) No. 1272/2008)

Remarks The classification criteria are met.

Acute oral toxicity (Components)**benzyl alcohol**Species mouse
LD50 1040 mg/kg**benzyl alcohol**Species rat
LD50 1620 mg/kg**2-piperazin-1-ylethylamine**Species rat
LD50 2140 mg/kg

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

2,2,4-Trimethylhexane-1,6-diamine

Species rat
LD50 910 mg/kg

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species rat
LD50 > 2000 mg/kg
Method OECD 423

amines, coco alkyl

Species rat
LD50 1240 to 1388 mg/kg
Method OECD 401

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Species rat
LD50 > 2000 mg/kg
Method OECD 423

2,4,6-tris(dimethylaminomethyl)phenol

Species rat
LD50 2169 mg/kg
Remarks The classification criteria are met.

(Z)-octadec-9-enylamine

Species rat
LD50 1200 to 2000 mg/kg
Method OECD 401

4-methylpentan-2-one

Species rat
LD50 2080 mg/kg
Method OECD 401

Acute dermal toxicity

ATE 7.629,95 mg/kg
59
Method calculated value (Regulation (EC) No. 1272/2008)
Remarks Based on available data, the classification criteria are not met.

Acute dermal toxicity (Components)**benzyl alcohol**

Species rabbit
LD50 > 2000 mg/kg

2-piperazin-1-ylethylamine

Species rabbit
LD50 866 mg/kg

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species rat
LD50 > 2000 mg/kg
Method OECD 402

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Species rat
LD50 > 2000 mg/kg
Method OECD 402

4-methylpentan-2-one

Species rat
LD50 > 2000 mg/kg

Acute inhalational toxicity

ATE > 100 mg/l
Administration/Form Vapors

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Method	calculated value (Regulation (EC) No. 1272/2008)
ATE	> 20 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)**benzyl alcohol**

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

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	rat
LC0	> 4,9 mg/l
Duration of exposure	4 h
Administration/Form	Dust/Mist
Method	OECD 403

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Species	rat
LC0	4,9 mg/l
Duration of exposure	4 h
Administration/Form	Dust/Mist
Method	OECD 403

4-methylpentan-2-one

ATE	11 mg/l
Administration/Form	Vapors

Skin corrosion/irritation

evaluation	corrosive
Remarks	The classification criteria are met.

Skin corrosion/irritation (Components)**amines, coco alkyl**

Species	rabbit
evaluation	corrosive

Serious eye damage/irritation

evaluation	corrosive
Remarks	The classification criteria are met.

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

evaluation	Suspected of damaging fertility. Suspected of damaging the unborn child.
Remarks	The classification criteria are met.

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Single exposure

Remarks The classification criteria are met.
evaluation May cause respiratory irritation.

Repeated exposure

Remarks The classification criteria are met.
evaluation Causes damage to organs through prolonged or repeated exposure

Specific Target Organ Toxicity (STOT) (Components)**amines, coco alkyl**

evaluation May cause respiratory irritation.

Aspiration hazard

The classification criteria are met.
Harmful: may cause lung damage if swallowed.

11.2 Information on other hazards**Endocrine disrupting properties with respect to humans**

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

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)**benzyl alcohol**

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

benzyl alcohol

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

2-piperazin-1-ylethylamine

Species	Fathead minnow (<i>Pimephales promelas</i>)		
LC50	2190		mg/l
Duration of exposure	96	h	

2,2,4-Trimethylhexane-1,6-diamine

Species	golden orfe (<i>Leuciscus idus</i>)		
LC50	174		mg/l
Duration of exposure	48	h	

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	zebra fish (<i>Brachydanio rerio</i>)		
LL50	14,8		mg/l
Duration of exposure	96	h	
Method	OECD 203		

amines, coco alkyl

Species	Fathead minnow (<i>Pimephales promelas</i>)		
---------	---	--	--

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

LC50 > 0,01 to 0,1 mg/l
Method OECD 203

2,4,6-tris(dimethylaminomethyl)phenol

Species carp (Cyprinus carpio)
LC50 175 mg/l
Duration of exposure 96 h

(Z)-octadec-9-enylamine

Species Fathead minnow (Pimephales promelas)
LC50 > 0,01 to 0,1 mg/l
Duration of exposure 96 h
Method OECD 203

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Species zebra fish (Brachydanio rerio)
LL50 25,8 mg/l
Duration of exposure 96 h
Method OECD 203

4-methylpentan-2-one

Species zebra fish (Brachydanio rerio)
LC50 > 179 mg/l
Duration of exposure 96 h
Method OECD 203

Daphnia toxicity (Components)**benzyl alcohol**

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

2-piperazin-1-ylethylamine

Species Daphnia magna
EC50 58 mg/l
Duration of exposure 48 h

2,2,4-Trimethylhexane-1,6-diamine

Species Daphnia magna
EC50 31,5 mg/l
Duration of exposure 24 h

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species Daphnia magna
EC50 4,6 mg/l
Duration of exposure 48 h
Method OECD 202

amines, coco alkyl

Species Daphnia magna
EC50 > 0,01 to 0,1 mg/l
Duration of exposure 48 h
Method OECD 202

amines, coco alkyl

Species Daphnia magna
NOEC > 0,01 to 0,1
Duration of exposure 21 Days
Method OECD 211

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Species Daphnia magna
EL50 14 to 51 mg/l
Duration of exposure 48 h
Method OECD 202

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

(Z)-octadec-9-enylamine

Species	Daphnia magna			
EC50	> 0,01	to	0,1	mg/l
Duration of exposure	48	h		
Method	OECD 202			

2,4,6-tris(dimethylaminomethyl)phenol

Species	Daphnia magna			
EC50	718			mg/l
Duration of exposure	96	h		

4-methylpentan-2-one

Species	Daphnia magna			
EC50	> 200			mg/l
Duration of exposure	48	h		
Method	OECD 202			

4-methylpentan-2-one

Species	Daphnia magna			
NOEC	30			mg/l
Duration of exposure	21	d		
Method	OECD 211			

Algae toxicity (Components)**benzyl alcohol**

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

2-piperazin-1-ylethylamine

Species	Pseudokirchneriella subcapitata			
EC50	> 1000			mg/l
Duration of exposure	72	h		

2,2,4-Trimethylhexane-1,6-diamine

Species	Scenedesmus subspicatus			
ErC50	43,5			mg/l
Duration of exposure	72	h		

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	Scenedesmus subspicatus			
EL50	3,14			mg/l
Duration of exposure	72	h		
Method	OECD 201			

amines, coco alkyl

Species	Scenedesmus subspicatus			
EC50	> 0,01	to	0,1	mg/l
Duration of exposure	72	h		

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

Species	Scenedesmus subspicatus			
EL50	15			mg/l
Duration of exposure	72	h		
Method	OECD 201			

2,4,6-tris(dimethylaminomethyl)phenol

Species	Desmodesmus subspicatus			
EC50	84			mg/l
Duration of exposure	72	h		
Method	OECD 201			

2,4,6-tris(dimethylaminomethyl)phenol

Species	Desmodesmus subspicatus			
NOEC	6,25			mg/l

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Duration of exposure	72	h	
Method	OECD 201		
(Z)-octadec-9-enylamine			
Species	Desmodesmus subspicatus		
EC50	> 0,01	to 0,1	mg/l
Duration of exposure	72	h	
Method	OECD 201		
4-methylpentan-2-one			
Species	Algae		
EC50	> 146		mg/l
Duration of exposure	7	d	
4-methylpentan-2-one			
Species	Algae		
NOEC	146		mg/l
Duration of exposure	7	Days	

Bacteria toxicity (Components)**benzyl alcohol**

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

benzyl alcohol

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

2,2,4-Trimethylhexane-1,6-diamine

Species	Pseudomonas putida		
EC50	89		mg/l
Duration of exposure	17	h	

2,4,6-tris(dimethylaminomethyl)phenol

Species	activated sludge		
NOEC	2		mg/l
Duration of exposure	28	h	

4-methylpentan-2-one

Species	Pseudomonas putida		
EC50	275		mg/l
Duration of exposure	16	h	
Method	DIN 38412 / Part 8		

12.2. Persistence and degradability**General information**

not determined

12.3. Bioaccumulative potential**General information**

not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Octanol/water partition coefficient (log Pow) (Components)**(Z)-octadec-9-enylamine**

log Pow 3,7

Bioconcentration factor (BCF) (Components)**(Z)-octadec-9-enylamine**

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

BCF > 500

12.4. Mobility in soil

General information

not determined

12.5. Results of PBT and vPvB assessment

General information

not determined

Results of PBT and vPvB assessment

The product contains no PBT substances

The product contains vPvB-substances.

Results of PBT and vPvB assessment (Ingredients)

Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

The substance meets vPvB-criteria.

12.6 Endocrine disrupting properties

General information

not determined

Endocrine disrupting properties with respect to the environment

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. 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

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	2735	2735	2735
14.2. UN proper shipping name	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ((Z)-octadec-9-enylamine, 2-piperazin-1-ylethylamine)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ((Z)-octadec-9-enylamine, 2-piperazin-1-ylethylamine)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ((Z)-octadec-9-enylamine, 2-piperazin-1-ylethylamine)
14.3. Transport hazard class(es)	8	8	8
Label			
14.4. Packing group	II	II	II
Limited Quantity	1 I	1 I	
Transport category	2		
14.5. Environmental hazards	 ENVIRONMENTALLY HAZARDOUS	Marine Pollutant  ENVIRONMENTALLY HAZARDOUS	 ENVIRONMENTALLY HAZARDOUS
Tunnel restriction code	E		

Information for all modes of transport**14.6. Special precautions for user**

The relevant transport regulations have to be considered.

Other information**14.7 Maritime transport in bulk according to IMO instruments**

no data

SECTION 15: Regulatory information *****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Major-accident categories acc. 2012/18/EU**

Category	E1	Hazardous to the Aquatic Environment	100000	kg	200000	kg
----------	----	--------------------------------------	--------	----	--------	----

VOC

VOC (EU)	0,61	%	6	g/l
----------	------	---	---	-----

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Other regulations, restrictions and prohibition regulationsHandling epoxy resin systems safely (published by PlasticsEurope) www.plasticseurope.org

This product meets the requirements of Regulation (EC) No. 1935/2004 on the limitation of VOC content. EU2004/42/IIA(j)500(2010): <500g/l VOC

Restriction according to annex XVII to regulation (EU) No 1907/2006

Conditions of restriction for the entries Annex XVII REACH should be considered.

Other information

The product contains substances according to: Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

15.2. Chemical safety assessment

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

SECTION 16: Other information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

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

Acute Tox. 4	H302	Calculation method
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Repr. 2	H361fd	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 1	H372	Calculation method
Asp. Tox. 1	H304	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

Hazard statements listed in Chapter 2/3

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic 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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
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.

CLP categories listed in Chapter 2/3

Acute Tox. 3	Acute toxicity, Category 3
Acute Tox. 4	Acute toxicity, Category 4

Trade name: Hardener FH for cds-Cable-Joint-Filler/ Filler-eco

Version: 3 / GB

Date revised: 13.05.2025

Substance number: 13744

Replaces Version: 2 / GB

Print date: 13.05.2025

Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1A	Skin corrosion, Category 1A
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A
STOT RE 1	Specific target organ toxicity - repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

Abbreviations

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route

RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

CAS: Chemical Abstracts Service

EAK: Europäischer Abfallkatalog

VOC: Volatile Organic Compound

MAK: Maximale Arbeitsplatz-Konzentration

AGW: Arbeitsplatzgrenzwert

BGW: Biologischer Grenzwert

NOEC: No observable effect concentration

LD: Lethal dose

LC: Lethal concentration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: Very persistent and very bioaccumulative

SVHC: Substances of very high concern

DNEL: Derived no effect level

PNEC: Predicted no effect concentration

OECD: Organisation for Economic Co-operation and Development

REACH: Registration, Evaluation, Autohorisation and Restriction of Chemicals

TRGS: Technische Regeln für Gefahrstoffe

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.