# **Hempel's Curing Agent 98140**



**1.4 Emergency telephone number** (0 41 01) 70 70 (08.00 - 17.00)

+43 1 406 43 43 (24 hrs)

Austria: Vergiftungsinformationszentrale

Switzerland: Swiss Toxicological Information Centre

+41 44 251 51 51 (in Switzerland dial 145) (24 hrs)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Austria / Germany

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

1.1 Product identifier

Product name: Hempel's Curing Agent 98140
Product identity: 9814000000, 00138862

Product type: Curing agent

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

Field of application: used only as part of two- or multi component products.

Ready-for-use mixture : (see base component)

Identified uses: Industrial applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details: Hempel (Germany) GmbH

Haderslebener Straße 9

25421 Pinneberg

Tel. (0 41 01) 70 70 Fax. (0 41 01) 70 71 31 hempel@hempel.com

Date of issue : 6 March 2025

Date of previous issue : 20 November 2023.

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Product definition: Mixture

Flam. Liq. 3, H226 FLAMMABLE LIQUIDS

Acute Tox. 4, H332 ACUTE TOXICITY (inhalation)
Skin Corr. 1C, H314 SKIN CORROSION/IRRITATION

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

Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION

Skin Sens. 1, H317 SKIN SENSITIZATION

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :







Signal word : Danger

Hazard statements: H226 - Flammable liquid and vapor.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H332 - Harmful if inhaled.

Precautionary statements:

Prevention: Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot

surfaces, sparks, open flames and other ignition sources. No smoking.

Response: IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a

POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor.

Hazardous ingredients:

benzyl alcohol

2,4,6-tris(dimethylaminomethyl)phenol

ethylbenzene

3,6-diazaoctanethylenediamin

Special packaging requirements

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# **SECTION 2: Hazards identification**

Containers to be fitted with child-

Not applicable.

resistant fastenings:

Tactile warning of danger: Not applicable.

# 2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result None known.

in classification:

# **SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) N	No. 1272/2008 [CLP]	Туре
<b>∭</b> lene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 5000 ppm	[1] [2]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 1200 mg/kg	[1]
2,4,6-tris(dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≥5 - ≤10	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1200 mg/kg	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥3 - ≤5	Fiam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	ATE [Inhalation (gases)] = 4500 ppm	[1] [2]
3,6-diazaoctanethylenediamin	REACH #: 01-2119487919-13 EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≥1 - ≤3	Acute Tox. 3, H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Dermal] = 550 mg/kg	[1]
bis[(dimethylamino)methyl] phenol	EC: 275-162-0 CAS: 71074-89-0	≥1 - ≤3	Skin Corr. 1C, H314 Eye Dam. 1, H318	-	[1]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤0.3	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	-	[1] [2]
		_	See Section 16 for the full text above.	of the H statements declared	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### I ype

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth

to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate

treatment (first aid).

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15

minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention

immediately.

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### **SECTION 4: First aid measures**

Skin contact: Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or

thinners. In case of burns flush with water until the pain ceases. While flushing remove clothing from the affected area unless it is burnt into the skin. If hospital treatment is necessary flushing must

continue during transfer and until the hospital staff takes over the treatment.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm

and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so

that vomit will not re-enter the mouth and throat.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that

fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

## Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation: Harmful if inhaled.

Skin contact: Causes severe burns. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion: Adverse symptoms may include the following:

stomach pains

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

Notes to physician : If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat

symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested

or inhaled.

Specific treatments: No specific treatment.

# **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Extinguishing media: Recommended: alcohol resistant foam, CO<sub>2</sub>, powders, water spray.

Not to be used: waterjet.

### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :

Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous combustion products: Decomposition products may include the following materials: carbon oxides nitrogen oxides

# 5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

### 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

# 6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

#### 6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

# **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

# 7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# Occupational exposure limits

Product/ingredient name	Exposure limit values
vylene	TRGS 900 OEL (Germany, 6/2024) [Xylol] Absorbed through skin.  TWA 8 hours: 220 mg/m³.  PEAK 15 minutes: 440 mg/m³.  TWA 8 hours: 50 ppm.  PEAK 15 minutes: 100 ppm.  DFG MAC-values list (Germany, 7/2023) [Xylene] Develop D. Absorbed through skin.  TWA 8 hours: 50 ppm.  PEAK 15 minutes: 100 ppm 4 times per shift [Interval: 1 hour].  TWA 8 hours: 220 mg/m³.  PEAK 15 minutes: 440 mg/m³ 4 times per shift [Interval: 1 hour].  EU OEL (Europe, 1/2022) [xylene, mixed isomers] Absorbed through skin.  TWA 8 hours: 50 ppm.  TWA 8 hours: 221 mg/m³.  STEL 15 minutes: 100 ppm.  STEL 15 minutes: 442 mg/m³.
benzyl alcohol	

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# **SECTION 8: Exposure controls/personal protection**

ozorion di Exposure controls/persona	Protection
	TRGS 900 OEL (Germany, 6/2024) Absorbed through skin.  PEAK 15 minutes: 10 ppm.  PEAK 15 minutes: 44 mg/m³.  TWA 8 hours: 22 mg/m³.  TWA 8 hours: 5 ppm.  DFG MAC-values list (Germany, 7/2023) Develop C. Absorbed through skin.  PEAK 15 minutes: 44 mg/m³ 4 times per shift [Interval: 1 hour].  PEAK 15 minutes: 10 ppm 4 times per shift [Interval: 1 hour].  TWA 8 hours: 22 mg/m³.  TWA 8 hours: 5 ppm.
ethylbenzene	TRGS 900 OEL (Germany, 6/2024) Absorbed through skin.  TWA 8 hours: 88 mg/m³.  PEAK 15 minutes: 176 mg/m³.  TWA 8 hours: 20 ppm.  PEAK 15 minutes: 40 ppm.  DFG MAC-values list (Germany, 7/2023) Carc 4, Develop C. Absorbed through skin.  PEAK 15 minutes: 40 ppm 4 times per shift [Interval: 1 hour].  PEAK 15 minutes: 176 mg/m³ 4 times per shift [Interval: 1 hour].  TWA 8 hours: 88 mg/m³.  TWA 8 hours: 20 ppm.  EU OEL (Europe, 1/2022) Absorbed through skin.  TWA 8 hours: 100 ppm.  TWA 8 hours: 442 mg/m³.  STEL 15 minutes: 200 ppm.  STEL 15 minutes: 884 mg/m³.
3,6-diazaoctanethylenediamin	DFG MAC-values list (Germany, 7/2023) Skin sensitizer.  Regulation on Limit Values - MAC (Austria, 4/2021) [Xylol (alle Isomeren, rein)]  PEAK 15 minutes: 442 mg/m³ 4 times per shift.  TWA 8 hours: 50 ppm.  PEAK 15 minutes: 100 ppm 4 times per shift.  TWA 8 hours: 221 mg/m³.  EU OEL (Europe, 1/2022) [xylene, mixed isomers] Absorbed through skin.  TWA 8 hours: 50 ppm.  TWA 8 hours: 221 mg/m³.  STEL 15 minutes: 100 ppm.  STEL 15 minutes: 442 mg/m³.
ethylbenzene	Regulation on Limit Values - MAC (Austria, 4/2021) Absorbed through skin.  TWA 8 hours: 100 ppm.  TWA 8 hours: 440 mg/m³.  CEIL 5 minutes: 200 ppm 8 times per shift.  CEIL 5 minutes: 880 mg/m³ 8 times per shift.  EU OEL (Europe, 1/2022) Absorbed through skin.  TWA 8 hours: 100 ppm.  TWA 8 hours: 442 mg/m³.  STEL 15 minutes: 200 ppm.  STEL 15 minutes: 884 mg/m³.

# **Biological exposure indices**

Product/ingredient name	Exposure limit values
w/lene	DFG BEI-values list (Germany, 7/2023) [Xylene (all isomers)] Notes: danger from percutaneous absorption (see p. 211 and p. 228).  BEI: 2000 mg/l, methylhippuric acid (toluric acid) (all isomers) [in urine]. Sampling time: end of exposure or end of shift.  TRGS 903 - BEI Values (Germany, 2/2024) [Xylene (all isomers)]  BEI: 2000 mg/l, methylhippuric acid [in urine]. Sampling time: end of exposure or end of shift.
ethylbenzene	DFG BEI-values list (Germany, 7/2023) Notes: danger from percutaneous absorption (see p. 211 and p. 228).  BEI: 250 mg/g creatinine, mandelic acid plus phenyl glyoxylic acid [in urine]. Sampling time: end of exposure or end of shift.  TRGS 903 - BEI Values (Germany, 2/2024)
	BEI: 250 mg/g creatinine, mandelic acid plus phenylglyoxylic acid [in urine].  Sampling time: end of exposure or end of shift.
Mene	VGU BEI (Austria, 9/2020) [xylenes] BEI Fitness: 1000 μg/l, xylene [in blood]. Sampling time: one year. BEI Fitness: 1.5 g/l, methylhippuricacid [in urine]. Sampling time: one year.

Recommended monitoring procedures

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# **SECTION 8: Exposure controls/personal protection**

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **Derived effect levels**

Product/ingredient name	Type - Population - Exposure	Value	Effects
w/lene	DNEL - Workers - Long term - Inhalation	77 mg/m³	Effects: Systemic
ľ	DNEL - Workers - Long term - Dermal	212 mg/kg bw/day	Effects: Systemic
benzyl alcohol	DNEL - Workers - Long term - Inhalation	22 mg/m³	Effects: Systemic
-	DNEL - Workers - Long term - Dermal	8 mg/kg bw/day	Effects: Systemic
2,4,6-tris(dimethylaminomethyl)phenol	DNEL - Workers - Long term - Inhalation	0.53 mg/m³	Effects: Systemic
· · · · · · · · · · · · · · · · · · ·	DNEL - Workers - Long term - Dermal	0.15 mg/kg bw/day	Effects: Systemic
ethylbenzene	DNEL - Workers - Long term - Dermal	180 mg/kg bw/day	Effects: Systemic
•	DNEL - Workers - Long term - Inhalation	77 mg/m³	Effects: Systemic
3,6-diazaoctanethylenediamin	DNEL - Workers - Long term - Dermal	0.57 mg/kg bw/day	Effects: Systemic
· ·	DNEL - Workers - Long term - Inhalation	1 mg/m³	Effects: Systemic
toluene	DNEL - Workers - Long term - Dermal	384 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	192 mg/m³	Effects: Systemic

### Predicted effect concentrations

Product/ingredient name	Compartment Detail	Value
<b>M</b> lene	Fresh water	0.327 mg/l
•	Marine water	0.327 mg/l
	Fresh water sediment	12.46 mg/kg
	Marine water sediment	12.46 mg/kg
	Soil	2.31 mg/kg
	Sewage Treatment Plant	6.68 mg/l
benzyl alcohol	Soil - Assessment Factors	0.456 mg/kg wwt
•	Sewage Treatment Plant - Assessment Factors	39 mg/l
	Sediment - Assessment Factors	5.27 mg/kg wwt
	Marine water sediment - Assessment Factors	0.527 mg/kg wwt
	Marine - Assessment Factors	0.1 mg/l
	Fresh water - Assessment Factors	1 mg/l
2,4,6-tris(dimethylaminomethyl)phenol	Fresh water	0.084 mg/l
	Marine water	0.0084 mg/l
	Sewage Treatment Plant	0.2 mg/l
ethylbenzene	Fresh water	0.1 mg/l
•	Marine water	0.01 mg/l
	Sewage Treatment Plant	9.6 mg/l
	Fresh water sediment	13.7 mg/kg
	Soil	2.68 mg/kg
3,6-diazaoctanethylenediamin	Fresh water	190 μg/l
•	Fresh water sediment	95.9 mg/kg
	Marine water	38 µg/l
	Marine water sediment	19.2 mg/kg
	Soil	19.1 mg/kg
	Sewage Treatment Plant	4.25 mg/l
toluene	Fresh water	0.68 mg/l
	Marine water	0.68 mg/l
	Sewage Treatment Plant	13.61 mg/l
	Fresh water sediment	16.39 mg/kg
	Marine water sediment	16.39 mg/kg
	Soil	2.89 mg/kg

# 8.2 Exposure controls

# Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

# Individual protection measures

General:

Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure. Where personal protection equipment is required this shall be chosen in accordance with German BGR regulations of the "Berufsgenossenschaften".

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# **SECTION 8: Exposure controls/personal protection**

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking,

using lavatory, and at the end of day.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment

indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face

respirator may be required instead.

Hand protection: Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The

quality of the chemical-resistant protective gloves must be chosen as a function of the specific

workplace concentrations and quantity of hazardous substances.

Three the actual work situation is unknown. Supplier of gloves should be contacted in order to find the

appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: polyvinyl alcohol (PVA), Silver Shield / Barrier / 4H gloves, Viton®

May be used: butyl rubber (>0.5 mm), nitrile rubber (>0.3 mm)

Short term exposure: neoprene rubber (>0.1 mm), natural rubber (latex) (>0.4 mm), polyvinyl chloride

(PVC), butyl rubber (>0.3 mm), nitrile rubber (>0.1 mm)

Body protection: Personal protective equipment for the body should be selected based on the task being performed and

the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Chemical-resistant apron.

Respiratory protection: When the product is applied by spraying and for continuous or prolonged work always wear an air-fed

respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle

filter of type P. (EN140) Be sure to use an approved/certified respirator or equivalent.

# **Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Color : Transparent

Odor : Solvent-like

pH: Testing not relevant or not possible due to nature of the product.

Melting point/freezing point: Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range: Testing not relevant or not possible due to nature of the product.

Flash point: Closed cup: 23°C (73.4°F)

Evaporation rate: Testing not relevant or not possible due to nature of the product.

Flammability: Highly flammable in the presence of the following materials or conditions: open flames, sparks and

static discharge and heat.

Vapor density : Not available.

Specific gravity : 0.96 g/cm³

Vapor pressure:

Partition coefficient (LogKow): Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature : Ingredient name °C °F

ii teiriperature .	Ingredient name	°C	°F	Method
	2,4,6-tris(dimethylaminomethyl)phenol	382	719.6	EU A.15

Decomposition temperature : Testing not relevant or not possible due to nature of the product.

Viscosity: Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

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# **SECTION 9: Physical and chemical properties**

Explosive properties: Slightly explosive in the presence of the following materials or conditions: open flames, sparks and

static discharge and heat.

Oxidizing properties: Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 45 % Water % by weight : Weighted average: 0 %

VOC content: 310.3 g/l

TOC Content: Weighted average: 281 g/l
Solvent Gas: Weighted average: 0.097 m³/l

## SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

#### 10.2 Chemical stability

The product is stable.

### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

#### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

### 10.5 Incompatible materials

Extremely reactive or incompatible with the following materials: acids.

Highly reactive or incompatible with the following materials: oxidizing materials.

Reactive or incompatible with the following materials: reducing materials and organic materials.

# 10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides

# **SECTION 11: Toxicological information**

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Inhalation of a corrosive substance may result in health effects such as stinging, coughing and in extreme cases, dyspnoea or loss of consciousness with a risk of lung damage, possibly lung oedema. Cauterization of skin and mucous membrane. If splashed in the eyes, the liquid may cause ireversible damage. Accidental swallowing may cause stinging and cauterization to mouth, oesophagus and stomach. Symptoms and signs include bloody vomiting, chock and loss of consciousness.

Direct contact with the eyes can cause irreversible damage, including blindness.

# **Acute toxicity**

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# **Hempel's Curing Agent 98140**



# **SECTION 11: Toxicological information**

Product/ingredient name	Result	Dose / Exposure	Effects
<b>y</b> lene	Rabbit - Dermal - LD50	>4200 mg/kg	
	Rat - Oral - LD50	3523 mg/kg	
	Rat - Inhalation - LC50 Vapor	6350 ppm [4 hours]	
hammid alaahal	Rat - Inhalation - LC50 Gas.	5000 ppm [4 hours]	
benzyl alcohol	Rat - Oral - LD50	1230 mg/kg	
	Rat - Inhalation - LC50 Dusts and mists	>4178 mg/m³ [4 hours]	
2,4,6-tris(dimethylaminomethyl) phenol	Rat - Oral - LD50	1200 mg/kg	Toxic effects: Peripheral Nerve and Sensation - Flaccid paralysis without
priorier			anesthesia (usually neuromuscular
			blockage) Lung, Thorax, or Respiration -
			Dyspnea
	Rat - Oral - LD50	2169 mg/kg	
	Rabbit - Dermal - LD50	1465 mg/kg	
ethylbenzene	Rat - Oral - LD50	3500 mg/kg	Toxic effects: Liver - Other changes
			Kidney, Ureter, and Bladder - Other
	Dallit Damed IDEO	. 5000	changes
2.6. diazaa atanathulan adiamin	Rabbit - Dermal - LD50	>5000 mg/kg	
3,6-diazaoctanethylenediamin	Rabbit - Dermal - LD50 Rat - Oral - LD50	550 mg/kg	
toluene	Rat - Oral - LD50	1716 mg/kg 636 mg/kg	
loidelle	Rat - Inhalation - LC50 Vapor	>20 mg/l [4 hours]	
	Trat - Illianation - E000 Vapor	- 20 mg/i [4 modis]	

# Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
pempel's Curing Agent 98140 xylene benzyl alcohol 2,4,6-tris(dimethylaminomethyl)phenol	5638.1 3523 1200 1200	4362.4 1100	18040.9 5000	236.5	
ethylbenzene 3,6-diazaoctanethylenediamin	3500	550	4500	11	

# Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
<b>xy</b> lene	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 5 milligrams
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams
	Rabbit - Skin - Irritant	'	
benzyl alcohol	Rabbit - Eyes - Visible necrosis Rabbit - Skin - Mild irritant		
2,4,6-tris(dimethylaminomethyl) phenol	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 50 Micrograms
	Rabbit - Skin - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 2 milligrams
ethylbenzene	Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 15 milligrams
	Rabbit - Respiratory - Mild irritant Rabbit - Eyes - Mild irritant		
3,6-diazaoctanethylenediamin	Rabbit - Eyes - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 milligrams
	Rabbit - Skin - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 5 milligrams
toluene	Rabbit - Eyes - Mild irritant	Duration of treatment/ exposure: 0.5 minutes	Amount/concentration applied: 100 mg
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 mg

# Sensitizer

Product/ingredient name	Species - Route of exposure	Result
3,6-diazaoctanethylenediamin	Guinea pig - skin	Result: Sensitizing

# Mutagenic effects

No known data avaliable in our database.

# Carcinogenicity

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# **SECTION 11: Toxicological information**

No known data avaliable in our database.

# Reproductive toxicity

No known data avaliable in our database.

# Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<b>o</b> fuene	Category 3		Narcotic effects

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
toluene	Category 2		-

# **Aspiration hazard**

Product/ingredient name	Result
ethylbenzene toluene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

# Potential chronic health effects

No known significant effects or critical hazards.

# 11.2 Information on other hazards

Endocrine disrupting properties : Me product does not meet the criteria to be considered as having endocrine disrupting properties

according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No.

1272/2008.

Other information : No additional known significant effects or critical hazards.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Do not allow to enter drains or watercourses.

Product/ingredient name	Result	Species	Exposure
penzyl alcohol	Acute - LC50	Fish	460 mg/l [96 hours]
	Acute - EC50	Daphnia	230 mg/l [48 hours]
	Acute - IC50	Algae	770 mg/l [72 hours]
2,4,6-tris(dimethylaminomethyl) phenol	Acute - EC50	Algae	84 mg/l [72 hours]
	Acute - LC50	Fish	175 mg/l [96 hours]
ethylbenzene	Chronic - NOEC - Fresh water	Algae - Green algae - Pseudokirchneriella subcapitata	<1000 µg/l [96 hours]
3,6-diazaoctanethylenediamin	Acute - EC50	Daphnia	31.1 mg/l [48 hours]
_	Acute - EC50	Algae	20 mg/l [72 hours]
	Acute - LC50	Fish	330 mg/l [96 hours]
toluene	Chronic - NOEC - Fresh water	Daphnia - Water flea - Daphnia magna	1000 µg/l [21 days]
	Chronic - NOEC - Fresh water	Algae - Green algae - Pseudokirchneriella subcapitata	<500000 μg/l [96 hours]

# 12.2 Persistence and degradability

Product/ingredient name	Test	Result
Mene		>60% [28 days] - Readily
	OECD Ready Biodegradability - Manometric Respirometry Test	90 - 98% [28 days] - Readily
benzyl alcohol	OECD Ready Biodegradability - Modified MITI Test	92 - 96% [14 days] - Readily
	OECD Ready Biodegradability - DOC Die-Away Test	95 - 97% [21 days] - Readily
2,4,6-tris(dimethylaminomethyl) phenol	OECD Ready Biodegradability - Closed Bottle Test	4% [28 days] - Not readily
ethylbenzene		>70% [28 days] - Readily
toluene		100% [14 days] - Readily

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# **Hempel's Curing Agent 98140**



# **SECTION 12: Ecological information**

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Mene			Readily
benzyl alcohol 2,4,6-tris(dimethylaminomethyl)			Readily Not readily
phenol			Boodily
ethylbenzene toluene			Readily Readily

# 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
wene benzyl alcohol	3.12 0.87		Low Low
2,4,6-tris(dimethylaminomethyl)phenol ethylbenzene 3,6-diazaoctanethylenediamin toluene	0.219 3.6 -1.661.4 2.73	- <sup>1</sup>   -   -	Low Low Low Low

# 12.4 Mobility in soil

# Soil/Water partition coefficient

Product/ingredient name	logKoc	Кос
Mene	1.59	39
benzyl alcohol	1.1	12.6442
2,4,6-tris(dimethylaminomethyl)phenol	2.72	525.589
ethylbenzene	2.23	170.406
3,6-diazaoctanethylenediamin	1.53	33.6474
toluene	2.07	117.115

# Results of PMT and vPvM assessment

Product/ingredient name	PMT	Р	M	T	vPvM	νP	νM
Mene	No	No	Yes	No	No	No	Yes
benzyl alcohol	No	No	Yes	No	No	No	Yes
2,4,6-tris(dimethylaminomethyl)phenol	No	No	Yes	No	No	No	No
ethylbenzene	No	No	Yes	Yes	No	No	No
3,6-diazaoctanethylenediamin	No	No	Yes	No	No	No	Yes
bis[(dimethylamino)methyl]phenol	No	No	No	No	No	No	No
toluene	No	No	Yes	Yes	No	No	No

Mobility:

The product does not meet the criteria to be considered as a PMT or vPvM.

# 12.5 Results of PBT and vPvB assessment

# Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	Р	В	Т	vPvB	νP	vB
wene see the see that the see t	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
2,4,6-tris(dimethylaminomethyl)phenol	No	No	No	No	No	No	No
ethylbenzene	No	No	No	Yes	No	No	No
3,6-diazaoctanethylenediamin	No	No	No	No	No	No	No
bis[(dimethylamino)methyl]phenol	No	No	No	No	No	No	No
toluene	No	No	No	Yes	No	No	No

# Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	Р	В	Т	vPvB	νP	vB
w/lene	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
2,4,6-tris(dimethylaminomethyl)phenol	No	No	No	No	No	No	No
ethylbenzene	No	No	No	Yes	No	No	No
3,6-diazaoctanethylenediamin	No	No	No	No	No	No	No
bis[(dimethylamino)methyl]phenol	No	No	No	No	No	No	No
toluene	No	No	No	Yes	No	No	No

Conclusion/Summary:

The product does not meet the criteria to be considered as a PBT or vPvB.

# 12.6 Endocrine disrupting properties

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# **Hempel's Curing Agent 98140**



# **SECTION 12: Ecological information**

Me product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

### **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC): 08 01 11\*

### **Packaging**

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Empty containers or liners may retain some product residues.

# **SECTION 14: Transport information**

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN3469	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	3 8	III	No.	Tunnel code (D/E)
IMDG Class	UN3469	MINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	3 8	III	No.	Emergency schedules F-E, S-C
IATA Class	UN3469	MINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	3 8	III	No.	-

PG\*: Packing group

Env.\* : Environmental hazards

### 14.6 Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

# 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

# **SECTION 15: Regulatory information**

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

## **Annex XIV**

None of the components are listed.

# Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

# Other EU regulations

Seveso category This product is controlled under the Seveso III Directive.

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# **Hempel's Curing Agent 98140**



# **SECTION 15: Regulatory information**

Seveso category

5c: Flammable liquids 2 and 3 not falling under P5a or P5b

**National regulations** 

**Austria** 

VbF class : A II

Very dangerous flammable liquid.

Limitation of the use of organic

solvents:

Permitted.

Germany

Storage code: 3

Hazardous incident ordinance: This product is controlled under the Germany Hazardous Incident Ordinance.

Hazard class for water :
Technical instruction on air quality

control:

AOX: The product contains organically bound halogens and can contribute to the AOX value in waste water.

References: Other Rules:

- BGR 190 (Rules for the use of respiratory protective equipment)

- BGR 192 (Rules for the use of eye and face protection)

- BGR 195 (Rules for the use of gloves)

**Switzerland** 

VOC content: 29.1 % (w/w)

**National regulations Non-GHS** 

List name	Product/ingredient name	Name on list	Classification	Notes
DFG MAC-values list	ethylbenzene	Ethylbenzene	K3, M3	-

## 15.2 Chemical Safety Assessment

-

# **SECTION 16: Other information**

Abbreviations and acronyms : ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

EUH statement = CLP-specific Hazard statement

RRN = REACH Registration Number

DNEL = Derived No Effect Level

PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements : H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.

H311 Toxic in contact with skin.

H312 Harmful 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.

H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] : Acute Tox. 3 ACUTE TOXICITY - Category 3 Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Chronic 3 AQUATIC HAZARD (LONG-TERM) - Category 3

Asp. Tox. 1 ASPIRATION HAZARD - Category 1

Eye Dam. 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2 Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3 Repr. 2 TOXIC TO REPRODUCTION - Category 2

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### **SECTION 16: Other information**

Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B Skin Corr. 1C SKIN CORROSION/IRRITATION - Category 1C Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2 Skin Sens. 1 SKIN SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1B

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

# Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification	
	On basis of test data	
ACUTE TOXICITY (inhalation)	Calculation method	
SKIN CORROSION/IRRITATION	Calculation method	
SERIOUS EYE DAMAGE/ EYE IRRITATION	Calculation method	
SKIN SENSITIZATION	Calculation method	

# Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

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# **Safe Use of Mixture Information Hempel's Curing Agent 98140**



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

# General description of the process covered

Indoor or outdoor spray painting by professionals or with brush, roller, putty knife, dipping etc. with good general room ventilation

This safe use information is linked to

: Professional spray painting and/or low-energy painting, Substance-specific

TETA

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

**Operational conditions** 

Place of use : Indoor or outdoor use

Range of application/Process

conditions

: Assumes a good standard of occupational hygiene and safety management has been implemented.

# Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation  Type and air changes per hour		Respiratory	Eye	Hands
activity							
Preparation of material for application	PROC05	1 to 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.
Loading of application equipment and handling of coated parts before curing	PROC08a	1 to 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.
Professional application of coatings by brush or roller	PROC10	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.
Professional application of coatings by spraying	PROC11	3 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.
Industrial application of coatings by spraying	PROC07	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Cleaning	PROC05	1 to 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.
Waste management	PROC08a	1 to 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.

See section 8 of this Safety Data Sheet for specifications.









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