

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 95078

9507810000 Product identity: Product type: Curing agent

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

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

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

Identified uses: Consumer applications, Professional applications.

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: 2 May 2023

Date of previous issue: 2 December 2022.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition:

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Acute Tox. 4, H302 ACUTE TOXICITY (oral)

Skin Corr. 1C, H314 SKIN CORROSION/IRRITATION SERIOUS EYE DAMAGE/ EYE IRRITATION

Eye Dam. 1, H318 Skin Sens. 1, H317 SKIN SENSITIZATION

Aquatic Chronic 2, H411 AQUATIC HAZARD (LONG-TERM)

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

2.2 Label elements

Hazard pictograms:







Signal word:

Hazard statements: H302 - Harmful if swallowed.

> H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction.

> H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements:

General: Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention: Wear protective gloves, protective clothing and eye or face protection. Avoid release to the

environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash

thoroughly after handling.

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

> Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. 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.

Store locked up. Storage:

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SECTION 2: Hazards identification

Disposal: Dispose of contents and container in accordance with all local, regional, national and international

regulations.

Hazardous ingredients: reaction products of Isophorone diamine and, BADGE and, 2,2'-[(1-methylethylidene)bis(4,,

phenyleneoxymethylene)]bisoxirane 2,4,6-tris(dimethylaminomethyl)phenol

Supplemental label elements: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Special packaging requirements

Containers to be fitted with child-

resistant fastenings:

Yes, applicable.

Tactile warning of danger :

Yes, 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) No. 1272/2008 [CLP] | | Туре |
|--|--|-----------|---|--|---------|
| reaction products of Isophorone diamine and, BADGE and, 2,2'-[(1-methylethylidene)bis(4,, phenyleneoxymethylene)] bisoxirane | REACH #: 01-2119972329-26 | ≥25 - ≤50 | Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 | ATE [Oral] = 500 mg/kg | [1] |
| 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 Acute Tox. 4, H332 Eye Irrit. 2, H319 | ATE [Oral] = 1230 mg/kg ATE [Inhalation (vapours)] = 11 mg/l | [1] |
| titanium dioxide | REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2 | ≥10 - ≤25 | Carc. 2, H351 (inhalation) | - | [1] [*] |
| bis(isopropyl)naphthalene | REACH #: 01-2119565150-48 EC: 254-052-6 CAS: 38640-62-9 | ≥3 - ≤5 | Asp. Tox. 1, H304 Aquatic Chronic 1, H410 | M [Chronic] = 1 | [1] |
| 2,4,6-tris(dimethylaminomethyl) phenol | REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 | ≥3 - ≤5 | Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 | ATE [Oral] = 1200 mg/kg | [1] |
| amide wax | REACH #: 01-0000017860-69 EC: 432-430-3 | ≥1 - ≤3 | Aquatic Chronic 4, H413 | - | [1] |
| salicylic acid | REACH #: 01-2119486984-17 EC: 200-712-3 CAS: 69-72-7 Index: 607-732-00-5 | ≥1 - <3 | Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d | ATE [Oral] = 891 mg/kg | [1] |
| trimethylolpropane | REACH #: 01-2119486799-10 EC: 201-074-9 CAS: 77-99-6 | ≤0.3 | Repr. 2, H361fd | - | [1] |
| | | | 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.

Type

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^[1] Substance classified with a health or environmental hazard

^[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

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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. In all cases of doubt, or when symptoms

persist, seek medical attention.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if

respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by

mouth. If unconscious, place in recovery position and seek medical advice.

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use

recognized skin cleanser. Do NOT use solvents or thinners.

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

Skin contact:

Eye contact : Causes serious eye damage.

Inhalation: No known significant effects or critical hazards.

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

Ingestion: Harmful if swallowed.

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, CO2, powders, water spray.

Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or

mixture:

In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained

and prevented from being discharged to any waterway, sewer or drain.

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

oxides

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SECTION 5: Firefighting measures

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. 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). Water polluting material.

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). 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

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

| Product/ingredient name | Exposure limit values |
|--------------------------------|---|
| No exposure limit value known. | |
| benzyl alcohol | DFG MAC-values list (Germany, 10/2021). Absorbed through skin. PEAK: 44 mg/m³, 4 times per shift, 15 minutes. PEAK: 10 ppm, 4 times per shift, 15 minutes. TWA: 22 mg/m³ 8 hours. TRGS 900 OEL (Germany, 2/2022). Absorbed through skin. PEAK: 10 ppm 15 minutes. PEAK: 44 mg/m³ 15 minutes. TWA: 22 mg/m³ 8 hours. TWA: 5 ppm 8 hours. |

Recommended monitoring procedures

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SECTION 8: Exposure controls/personal protection

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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 | Туре | Exposure | Value | Population | Effects |
|---------------------------------------|------|----------------------|------------------------|------------|----------|
| benzyl alcohol | DNEL | Long term Inhalation | 22 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 8 mg/kg bw/day | Workers | Systemic |
| bis(isopropyl)naphthalene | DNEL | Long term Dermal | 4.3 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 30 mg/m ³ | Workers | Systemic |
| 2,4,6-tris(dimethylaminomethyl)phenol | DNEL | Long term Inhalation | 0.53 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 0.15 mg/kg bw/day | Workers | Systemic |
| salicylic acid | DNEL | Long term Dermal | 2 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 5 mg/m³ | Workers | Systemic |
| trimethylolpropane | DNEL | Long term Dermal | 0.94 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 3.3 mg/m³ | Workers | Systemic |

Predicted effect concentrations

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|---------------------------------------|------------------------|-----------------|--------------------|
| penzyl alcohol | Soil | 0.456 mg/kg wwt | Assessment Factors |
| | Sewage Treatment Plant | 39 mg/l | Assessment Factors |
| | Sediment | 5.27 mg/kg wwt | Assessment Factors |
| | Marine water sediment | 0.527 mg/kg wwt | Assessment Factors |
| | Marine | 0.1 mg/l | Assessment Factors |
| | Fresh water | 1 mg/l | Assessment Factors |
| bis(isopropyl)naphthalene | Fresh water | 0.236 µg/l | - |
| | Marine water | 0.0236 µg/l | - |
| | Fresh water sediment | 0.853 mg/kg dwt | - |
| | Marine water sediment | 0.085 mg/kg dwt | - |
| | Soil | 0.171 mg/kg dwt | - |
| | Sewage Treatment Plant | 0.15 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 | - |
| salicylic acid | Fresh water sediment | 1.42 mg/kg | - |
| • | Soil | 0.166 mg/kg | - |
| | Fresh water | 0.2 mg/l | - |
| | Marine water | 0.02 mg/l | - |
| | Marine water sediment | 0.142 mg/kg | - |
| | Sewage Treatment Plant | 162 mg/l | - |

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 workstation 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".

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

using lavatory, and at the end of day.

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

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 chemical-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.

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SECTION 8: Exposure controls/personal protection

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

Short term exposure: nitrile rubber, neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl

chloride (PVC)

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

the risks involved handling this product.

Respiratory protection: 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. 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 : White

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: 105°C (221°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

Slightly flammable in the presence of the following materials or conditions: heat.

Lower and upper explosive

(flammable) limits:

1.3 - 13 vol %

Vapor pressure: 0.002 kPa This is based on data for the following ingredient: reaction products of Isophorone diamine

and, BADGE and, 2,2'-[(1-methylethylidene)bis(4,,phenyleneoxymethylene)]bisoxirane

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

Specific gravity: 1.275 g/cm³

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

Auto-ignition temperature: Lowest known value: 382°C (719.6°F) (2,4,6-tris(dimethylaminomethyl)phenol).

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.

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: 25 % Water % by weight : Weighted average: 0 %

VOC content : 68.7 g/l

TOC Content: Weighted average: 62 g/l
Solvent Gas: Weighted average: 0.07 m³/l

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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

No specific data.

10.5 Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials.

Slightly 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 metal oxide/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.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---------------------------------|---------------------------------|---------|-------------|----------|
| benzyl alcohol | LC50 Inhalation Dusts and mists | Rat | >4178 mg/m³ | 4 hours |
| | LD50 Oral | Rat | 1230 mg/kg | - |
| titanium dioxide | LC50 Inhalation Dusts and mists | Rat | >6.8 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| bis(isopropyl)naphthalene | LD50 Dermal | Rat | >4000 mg/kg | - |
| , , , , , , | LD50 Oral | Rat | >4000 mg/kg | - |
| 2,4,6-tris(dimethylaminomethyl) | LD50 Dermal | Rabbit | 1465 mg/kg | - |
| phenol | | | | |
| · | LD50 Oral | Rat | 1200 mg/kg | - |
| | LD50 Oral | Rat | 2169 mg/kg | - |
| salicylic acid | LC50 Inhalation Dusts and mists | Rat | >0.9 mg/l | 1 hours |
| , | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | 891 mg/kg | - |
| trimethylolpropane | LD50 Oral | Rat | 14100 mg/kg | - |

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 |
|---|------------------------------|-----------------|------------------------------|--------------------------------|--|
| Hempel's Curing Agent 95078 reaction products of Isophorone diamine and, BADGE and, 2,2'-[(1-methylethylidene)bis(4,, phenyleneoxymethylene)]bisoxirane | 1106.7 500 | | | 47.1 | |
| benzyl alcohol 2,4,6-tris(dimethylaminomethyl)phenol salicylic acid trimethylolpropane | 1230 1200 891 14100 | | | 11 | |

Irritation/Corrosion

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SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure |
|--|-------------------------|---------|-------|--------------------------------------|
| benzyl alcohol | Eyes - Visible necrosis | Rabbit | - | - |
| | Skin - Mild irritant | Rabbit | - | - |
| titanium dioxide | Skin - Mild irritant | Human | - | 72 hours 300 Micrograms Intermittent |
| 2,4,6-tris(dimethylaminomethyl) phenol | Eyes - Severe irritant | Rabbit | - | 24 hours 50 Micrograms |
| | Skin - Severe irritant | Rabbit | - | 24 hours 2 milligrams |
| salicylic acid | Eyes - Severe irritant | Rabbit | - | - |

Mutagenic effects

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Teratogenic effects

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|----------|-------------------|---------------|
| No known data avaliable in our database. | | | |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|----------|-------------------|---------------|
| No known data avaliable in our database. | | | |

Aspiration hazard

| Product/ingredient name | Result |
|---------------------------|--------------------------------|
| bis(isopropyl)naphthalene | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

11.2 Information on other hazards

Endocrine disrupting properties : See Section 15 for details.

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. Toxic to aquatic life with long lasting effects.

| Product/ingredient name | Result | Species | Exposure |
|--|-----------------------|---------|----------|
| benzyl alcohol | Acute EC50 230 mg/l | Daphnia | 48 hours |
| | Acute IC50 770 mg/l | Algae | 72 hours |
| | Acute LC50 460 mg/l | Fish | 96 hours |
| titanium dioxide | Acute LC50 >100 mg/l | Daphnia | 48 hours |
| | Acute LC50 >100 mg/l | Fish | 96 hours |
| bis(isopropyl)naphthalene | Acute LC50 1.7 mg/l | Daphnia | 48 hours |
| | Acute NOEC 0.013 mg/l | Daphnia | 21 days |
| 2,4,6-tris(dimethylaminomethyl) phenol | Acute EC50 84 mg/l | Algae | 72 hours |
| | Acute LC50 175 mg/l | Fish | 96 hours |

12.2 Persistence and degradability

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SECTION 12: Ecological information

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|--|--|--------|------------|
| reaction products of Isophorone diamine and, BADGE and, 2,2'-[(1-methylethylidene)bis(4,, phenyleneoxymethylene)]bisoxirane | - | 0 % - Not readily - 28 days | - | - |
| benzýl alcohól | OECD 301A 301A Ready Biodegradability - DOC Die-Away Test | 95 - 97 % - Readily - 21 days | - | - |
| | OECD 301C 301C Ready Biodegradability - Modified MITI Test (I) | 92 - 96 % - Readily - 14 days | - | - |
| 2,4,6-tris(dimethylaminomethyl) phenol | OECD 301D 301D Ready Biodegradability - Closed Bottle Test | 4 % - Not readily - 28 days | - | - |
| amide wax salicylic acid | - - | <70 % - Not readily - 28 days 100 % - Readily - 14 days | - | - |
| trimethylolpropane | OECD 302B Inherent Biodegradability: Zahn-Wellens/ EMPA Test | 100 % - Readilý - 28 days | - | - |
| Product/ingredient name | Aquatic half-life | Photolysis | Riodea | radahility |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-----------------------------------|-------------------|------------|------------------|
| reaction products of Isophorone | - | - | Not readily |
| diamine and, BADGE and, 2,2'-[| | | |
| (1-methylethylidene)bis(4,, | | | |
| phenyleneoxymethylene)]bisoxirane | | | |
| benzyl alcohol | - | - | Readily |
| 2,4,6-tris(dimethylaminomethyl) | - | - | Not readily |
| phenol | | | - |
| amide wax | - | - | Not readily |
| salicylic acid | - | - | Readily |
| trimethylolpropane | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--|-----------------------|----------------------------------|
| benzyl alcohol bis(isopropyl)naphthalene 2,4,6-tris(dimethylaminomethyl)phenol salicylic acid trimethylolpropane | 0.87 6.081 0.219 2.21 - 2.26 -0.47 | 1800 - 6400 - - | low high low low low |

12.4 Mobility in soil

Soil/water partition coefficient

No known data avaliable in our database.

(K_{oc}):

Mobility: No known data avaliable in our database.

12.5 Results of PBT and vPvB assessment

| Product/ingredient name | PBT | Р | В | Т | vPvB | vP | vB | | |
|---|-----|---|---|---|------|----|----|--|--|
| This mixture does not contain any substances that are assessed to be a PBT or a vPvB. | | | | | | | | | |

12.6 Endocrine disrupting properties

See Section 15 for details.

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.

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

European waste catalogue (EWC): 08 01 11*

Packaging

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SECTION 13: Disposal considerations

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. Tra | 3 nsport hazard class(es) | 14.4 PG* | 14.5 Env* | Additional information |
|------------------|---------------------|------------------------------------|------------|------------------------------|-------------|--------------|---|
| ADR/RID Class | UN3066 | PAINT | 8 | ¥2 | III | Yes. | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code (E) |
| IMDG Class | UN3066 | PAINT. (bis(isopropyl)naphthalene) | 8 | 42 | III | Yes. | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-A, S-B |
| IATA Class | UN3066 | PAINT | 8 | | III | Yes. | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

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.

Seveso category

E2: Hazardous to the aquatic environment - Chronic 2

National regulations

Austria

Limitation of the use of organic

Forbidden

solvents : Germany

Storage code: 8A

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

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SECTION 15: Regulatory information

Hazard class for water: 3

Technical instruction on air quality TA-Luft Number 5.2.5: 43.2%

control: TA-Luft Class I - Number 5.2.5: 24.4%

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: 0 % (w/w)

National regulations Non-GHS

| List name | Product/ingredient name | Name on list | Classification | Notes |
|---------------------|-------------------------|---------------------------------------|----------------|-------|
| DFG MAC-values list | titanium dioxide | Titanium dioxide (inhalable fraction) | K3 | - |

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: H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.

H319 Causes serious eye damage. Causes serious eye irritation.

H332 Harmful if inhaled. H351 Suspected of causing cancer.

H361d Suspected of damaging the unborn child.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

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

Aquatic Chronic 1 AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2 AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 4 AQUATIC HAZARD (LONG-TERM) - Category 4

Asp. Tox. 1 ASPIRATION HAZARD - Category 1 Carc. 2 CARCINOGENICITY - Category 2

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

Repr. 2 TOXIC TO REPRODUCTION - Category 2
Skin Corr. 1C Skin CORROSION/IRRITATION - Category 1C

Skin Sens. 1 SKIN SENSITIZATION - Category 1

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

| Classification | Justification |
|--|---|
| SKIN CORROSION)/IRRITATION SERIOUS EYE DAMAGE/ EYE IRRITATION SKIN SENSITIZATION | Calculation method Calculation method Calculation method Calculation method Calculation method 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 95078



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 painting by professionals by dipping or with brush, roller, putty knife etc. with enhanced ventilation or local exhaust ventilation (LEV)

This safe use information is linked to

: Professional low-energy painting, near-industrial setting - Level I

HMP I/PW 02a

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

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

Operational conditions

Place of use : Indoor 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 | • | | ion | Respiratory | Eye | Hands | |
|--|---------|-------------------|--|--|--|---|---------------------------------------|
| activity | (ies) | uuration | Type and air changes per hour | | | | |
| Preparation of material for application | PROC05 | More than 4 hours | Enhanced (mechanical) room ventilation | 5 - 10 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Loading of application equipment and handling of coated parts before curing | PROC08b | More than 4 hours | Enhanced (mechanical) room ventilation | 5 - 10 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Industrial application of coatings by other than spraying | PROC10 | More than 4 hours | Local exhaust ventilation | Refer to relevant technical standards | Wear a respirator conforming to EN140 with an assigned protection factor of at least 10. | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Film formation - force drying, stoving and other technologies | PROC04 | More than 4 hours | Enhanced (mechanical) room ventilation | 5 - 10 | None | None | None |
| Cleaning | PROC05 | More than 4 hours | Enhanced (mechanical) room ventilation | 5 - 10 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Waste management | PROC08b | More than 4 hours | Enhanced (mechanical) room ventilation | 5 - 10 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |

See chapter 8 of this Safety Data Sheet for specifications.







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Safe Use of Mixture Information Hempel's Curing Agent 95078



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 painting by professionals with brush or roller, with good general room ventilation (open doors/windows)

This safe use information is

: Professional painting, indoor brush/roller - Level I

linked to

CEPE / HMP PW 04a

Sector(s) of use

: Professional uses

Product category(ies)

: Coatings and paints, thinners, paint removers

Operational conditions

Place of use : Indoor use

Risk management measures (RMM)

| Contributing | Process | Maximum | Ventilation | | Respiratory | Eye | Hands |
|--|---------|-------------------|-------------------------------|-------|-------------|---|---------------------------------------|
| activity | (ies) | duration | Type and air changes per hour | | | | |
| Preparation of material for application | PROC05 | More than 4 hours | Good general room ventilation | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Loading of application equipment and handling of coated parts before curing | PROC08a | More than 4 hours | Good general room ventilation | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Professional application of coatings by brush or roller | PROC10 | More than 4 hours | Good general room ventilation | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Film formation - force drying, stoving and other technologies | PROC04 | More than 4 hours | Good general room ventilation | 3 - 5 | None | None | None |
| Cleaning | PROC05 | More than 4 hours | Good general room ventilation | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Waste management | PROC08a | More than 4 hours | Good general room ventilation | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |

See chapter 8 of this Safety Data Sheet for specifications.





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Safe Use of Mixture Information Hempel's Curing Agent 95078



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

Outdoor painting by professionals by dipping or with brush, roller, putty knife etc.

This safe use information is

linked to

: Professional painting, outdoor brush/roller - Level I

CEPE / HMP PW 06a

Sector(s) of use : Professional uses

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

Operational conditions

Place of use : Outdoor use

Risk management measures (RMM)

| Contributing | Process | Maximum | Ventilation | | Respiratory | Eye | Hands |
|--|-------------------|-------------------|-------------------------------|-------|-------------|---|---------------------------------------|
| activity | category (ies) | duration | Type and air changes per hour | | | | |
| Preparation of material for application | PROC05 | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Loading of application equipment and handling of coated parts before curing | PROC08a | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Professional application of coatings by brush or roller | PROC10 | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Film formation - force drying, stoving and other technologies | PROC04 | More than 4 hours | Outdoors | 3 - 5 | None | None | None |
| Cleaning | PROC05 | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Waste management | PROC08a | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |

See chapter 8 of this Safety Data Sheet for specifications.





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Safe Use of Mixture Information

Hempel's Curing Agent 95078



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

Outdoor painting by professionals by dipping or with brush, roller, putty knife etc.

This safe use information is linked to

: Professional low-energy painting, near-industrial setting - Level I

HMP I/PW 06a

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

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

Operational conditions

Place of use : 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 | Process | Maximum | aximum Ventilation Respiratory uration Type and air changes per hour | | Respiratory | Eye | Hands |
|---|-------------------|-------------------|--|-------|-------------|---|---------------------------------------|
| activity | category (ies) | duration | | | | | |
| Preparation of material for application | PROC05 | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Loading of application equipment and handling of coated parts before curing | PROC08b | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Industrial application of coatings by other than spraying | PROC10 | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Film formation - force drying, stoving and other technologies | PROC04 | More than 4 hours | Outdoors | 3 - 5 | None | None | None |
| Cleaning | PROC05 | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Waste management | PROC08b | More than 4 hours | Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |

See chapter 8 of this Safety Data Sheet for specifications.



