# SAFETY DATA SHEET



### **TEKNOFLOOR HARDENER 500H A**

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

1.1 Product identifier

**Product name** : TEKNOFLOOR HARDENER 500H A

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

**Product description** : Hardener.

1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person responsible for this SDS

: prod-safe@teknos.com

**National contact** 

Teknos (UK) Limited, 7 Longlands Rd, Bicester, Oxfordshire OX26 5AH, United Kingdom. Tel. +44 (0) 1869 208005.

1.4 Emergency telephone number

Telephone number : Teknos UK Limited; TEL: +44 1608 683 494; Opening hours: MON-FRI, 7am – 6pm.

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

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

Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F (Fertility) Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

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

2.2 Label elements

**Hazard pictograms** 







Signal word : Danger

**Hazard statements** : H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H360F - May damage fertility.

H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

**General** : Not applicable.

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### **SECTION 2: Hazards identification**

**Prevention** 

: P201 - Obtain special instructions before use.

P280 - Wear protective gloves. Wear protective clothing. Wear eye or face

protection.

P273 - Avoid release to the environment.

Response

: P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or

physician. Do NOT induce vomiting.

P303 + P361 + P353 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER

or physician.

P305 + P310 - IF IN EYES: Immediately call a POISON CENTER or physician.

Storage

: Not applicable.

**Disposal** 

: P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

**Hazardous ingredients** 

: 3-aminomethyl-3,5,5-trimethylcyclohexylamine

bisphenol A

Supplemental label

elements

:

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

#### 2.3 Other hazards

Other hazards which do not result in classification

: None known.

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

#### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
3-aminomethyl-3,5, 5-trimethylcyclohexylamine	REACH #: 01-2119514687-32 EC: 220-666-8 CAS: 2855-13-2 Index: 612-067-00-9	≥50 - <55	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[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	[1]
bisphenol A	REACH #: 01-2119457856-23 EC: 201-245-8 CAS: 80-05-7 Index: 604-030-00-0	≤10	Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F (Fertility) STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
2,4,6-tris(dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≤5	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]

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SECTION 3: Composition/information on ingredients				
	See Section 16 for the full text of the H statements declared above.			

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

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

### 4.1 Description of first aid measures

**Eye contact** 

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Inhalation** 

: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact** 

: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**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 <u>Over-exposure signs/symptoms</u>

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

**Eye contact** : Adverse symptoms may include the following:

watering redness

**Inhalation** : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

pain or irritation redness

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

**Ingestion** : Adverse symptoms may include the following:

stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

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

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

### 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 harmful 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

: In a fire, decomposition may produce toxic gases/fumes.

#### 5.3 Advice for firefighters

Special protective actions for fire-fighters

: 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.

Special protective equipment for fire-fighters

: 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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

: Avoid dispersal of spilt 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. May be harmful to the environment if released in large quantities.

### 6.3 Methods and material for containment and cleaning up

#### **Small spill**

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

### Large spill

: Stop leak if without risk. Move containers from spill area. Approach the 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt 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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

#### **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

### **Advice on general** occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

### 7.3 Specific end use(s)

solutions

Recommendations : Not available. **Industrial sector specific** : Not available.

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### SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

### Occupational exposure limits

bisphenol A

### EH40/2005 WELs (United Kingdom (UK), 8/2018).

TWA: 2 mg/m3 8 hours.

# procedures

**Recommended monitoring**: 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.

#### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
3-aminomethyl-3,5,	DNEL	Long term Oral	0.526 mg/	Consumers	Systemic
5-trimethylcyclohexylamine			kg		

### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
3-aminomethyl-3,5, 5-trimethylcyclohexylamine	Fresh water	0.06 mg/l	-
, , ,	Marine water	0.006 mg/l	-
	Fresh water sediment	5.784 mg/kg dwt	-
	Marine water sediment	0.578 mg/kg dwt	-
	Soil	1.121 mg/kg dwt	-
	Sewage Treatment	3.18 mg/l	-
	Plant		

#### 8.2 Exposure controls

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### Individual protection measures

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **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.

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### **Skin protection**

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

#### Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Recommendations: Wear suitable gloves tested to EN374.

< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm

> 8 hours (breakthrough time): 4H / Silver Shield® gloves.

Wash hands before breaks and immediately after handling the product.

### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Refer to European Standard EN 14605 for further information on material and design requirements and test methods.

#### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Respiratory protection**

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type: A

spray application Filter type: A P

# 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

### **Appearance**

Physical state: Liquid.Colour: VariousOdour: Slight

Odour threshold : Not available.

PH : Not available.

Melting point/freezing point : Not available.

Initial boiling point and : Not available.

boiling range

Flash point : Closed cup: 101°C

**Evaporation rate** Not available. Flammability (solid, gas) : Not available. Upper/lower flammability or Lower: 1.3% explosive limits Upper: 13% Not available. Vapour pressure Not available. Vapour density kg/l **Density** Solubility(ies) Not available. Partition coefficient: n-octanol/ : Not available.

water

Auto-ignition temperature: Not available.Decomposition temperature: Not available.Viscosity: Not available.Explosive properties: Not available.

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

Oxidising properties : Not available.

9.2 Other information

VOC : 0 g/l
Solubility in water : Not available.

No additional information.

### **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**: No specific data.

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
3-aminomethyl-3,5,	LC50 Inhalation Dusts and	Rat	>5.01 mg/l	4 hours
5-trimethylcyclohexylamine	mists			
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1030 mg/kg	-
Benzyl alcohol	LC50 Inhalation Dusts and	Rat - Male,	4200 mg/m <sup>3</sup>	4 hours
	mists	Female		
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1230 mg/kg	-
bisphenol A	LD50 Oral	Rat	1200 mg/kg	-
2,4,6-tris	LD50 Dermal	Rat	1280 mg/kg	-
(dimethylaminomethyl)				
phenol				
	LD50 Oral	Rat	1200 mg/kg	-

**Conclusion/Summary**: Harmful if swallowed.

**Acute toxicity estimates** 

Route	ATE value
Dermal	1301.8 mg/kg 2012.5 mg/kg 17.3 mg/l

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
3-aminomethyl-3,5, 5-trimethylcyclohexylamine	Skin - Irritant	Rabbit	-	-	-
	Eyes - Severe irritant	Rabbit	-	-	-
Benzyl alcohol	Skin - Mild irritant	Man	-	48 hours 16 milligrams	-
	Skin - Moderate irritant	Pig	-	100 Percent	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-

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### **SECTION 11: Toxicological information**

bisphenol A	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	250 milligrams	-
2,4,6-tris (dimethylaminomethyl)	Eyes - Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
phenol	Skin - Mild irritant	Rat	-	0.025 Mililiters	-
	Skin - Severe irritant Skin - Severe irritant	Rat Rabbit	-	0.25 Mililiters 24 hours 2 milligrams	-

**Conclusion/Summary** 

: Causes severe skin burns and eye damage.

### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
3-aminomethyl-3,5, 5-trimethylcyclohexylamine	skin	Rabbit	Sensitising

**Conclusion/Summary** 

: May cause an allergic skin reaction.

**Mutagenicity** 

**Conclusion/Summary** 

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

Carcinogenicity

Conclusion/Summary

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

Reproductive toxicity

**Conclusion/Summary** 

: May damage fertility.

**Teratogenicity** 

**Conclusion/Summary** 

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

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
bisphenol A	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### **Aspiration hazard**

Not available.

Information on likely routes : Not available.

of exposure

Potential acute health effects

**Eye contact** : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

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

Ingestion : Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

: Adverse symptoms may include the following: **Eye contact** 

> pain watering redness

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### **SECTION 11: Toxicological information**

**Inhalation** : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains

reduced foetal weight increase in foetal deaths skeletal malformations

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure** 

Potential immediate : 1

effects

: Not available.

: Not available.

Potential delayed effects : Not available.

Long term exposure

**Potential immediate** 

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.

Fertility effects : May damage fertility.

Other information : Not available.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
3-aminomethyl-3,5, 5-trimethylcyclohexylamine	EC50 >50 mg/l Fresh water	Algae - Desmodesmus Subspicatus	72 hours
	LC50 110 mg/l Fresh water	Fish - Leuciscus idus	96 hours
	NOEC 1.5 mg/l	Algae - Desmodesmus subspicatus	72 hours
	NOEC 3 mg/l	Daphnia - Daphnia Magna	-
Benzyl alcohol	Acute LC50 10000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
bisphenol A	Acute EC50 1000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 1.506 mg/l Marine water	Algae - Prorocentrum minimum - Exponential growth phase	72 hours
	Acute EC50 7.75 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 50.4 µg/l Marine water	Crustaceans - Artemia sinica	48 hours
	Acute LC50 3.5 mg/l Marine water	Fish - Rivulus marmoratus - Embryo	96 hours

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#### **SECTION 12: Ecological information** Chronic NOEC 2 mg/l Fresh water Algae - Chlorolobion braunii -4 days Exponential growth phase Chronic NOEC 10 µg/l Marine water Crustaceans - Tigriopus 21 days iaponicus - Nauplii Chronic NOEC 30 µg/l Fresh water Daphnia - Daphnia magna -21 days Neonate Chronic NOEC 0.2 µg/l Fresh water Fish - Carassius auratus - Adult 90 days

**Conclusion/Summary** 

: Harmful to aquatic life with long lasting effects.

### 12.2 Persistence and degradability

**Conclusion/Summary** : This product has not been tested for biodegradation.

Aquatic half-life	Photolysis	Biodegradability
-	-	Not readily
	Aquatic half-life	-

### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
3-aminomethyl-3,5, 5-trimethylcyclohexylamine Benzyl alcohol bisphenol A 2,4,6-tris (dimethylaminomethyl) phenol	0.99 0.87 3.4 0.219	- 20 to 67	low low low

### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

**Mobility** : Not available.

#### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable. **vPvB** : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

### SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### **Product**

**Methods of disposal** 

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** 

: The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue: 080111\*, 200127\*

(EWC)

### **Packaging**

**Methods of disposal** 

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

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

**Special precautions** 

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

### **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3066	UN3066	UN3066	UN3066
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport	8	8	8	8
hazard class(es)				
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	Tunnel code (E)	-	-	-

14.6 Special precautions for : 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 Transport in bulk according to Annex II of Marpol and the IBC Code : Not relevant/applicable due to nature of the product.

## 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 authorisation** 

**Annex XIV** 

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property		Reference number	Date of revision
4,4'-isopropylidenediphenol; bisphenol A; BPA	Toxic to reproduction	Candidate	-	1/12/2017

**Annex XVII - Restrictions** 

: Restricted to professional users.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Other EU regulations

**Europe inventory** : All components are listed or exempted.

**Black List Chemicals** 

(76/464/EEC)

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### **SECTION 15: Regulatory information**

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
bisphenol A	-	-		Repr. 1B, H360F (Fertility)

### Ozone depleting substances (1005/2009/EU)

Not listed.

### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

### **Seveso Directive**

This product is not controlled under the Seveso Directive.

### **International regulations**

### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

### Montreal Protocol (Annexes A, B, C, E)

Not listed.

### **Stockholm Convention on Persistent Organic Pollutants**

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

### 15.2 Chemical safety

assessment

: This product contains substances for which Chemical Safety Assessments are still

required.

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

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification	
Acute Tox. 4, H302	Calculation method	
Skin Corr. 1B, H314	Calculation method	
Eye Dam. 1, H318	Calculation method	
Skin Sens. 1, H317	Calculation method	
Repr. 1B, H360F (Fertility)	Calculation method	
Aquatic Chronic 3, H412	Calculation method	

### Full text of abbreviated H statements

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

H302	Harmful if swallowed.
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.
H335	May cause respiratory irritation.
H360F	May damage fertility.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### Full text of classifications [CLP/GHS]

ACUTE TOYICITY (and) Cotagon (4
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
REPRODUCTIVE TOXICITY (Fertility) - Category 1B
SKIN CORROSION/IRRITATION - Category 1B
SKIN CORROSION/IRRITATION - Category 2
SKIN SENSITISATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
(Respiratory tract irritation) - Category 3

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EKNOFLOOR HARDENER 500H A All variants

### **Notice to reader**

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

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