

1.4 Emergency telephone number

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

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

## **1.1 Product identifier**

Product name :	<mark>⊭</mark> empel's High Protect II Base
Product identity :	3578924700
Product type :	epoxy paint (base for 2-component product)

## 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 :	35780 = 35789 3 vol. / 95078 2 vol.
Identified uses :	Consumer applications, Professional applications.

## 1.3 Details of the supplier of the safety data sheet

Company details :	HEMPEL A/S Lundtoftegårdsvej 91	Emergency telephone number (with hours of operation)
	DK-2800 Kgs. Lyngby Denmark Tel.: + 45 45 93 38 00 hempel@hempel.com	+45 45 93 38 00 (08.00 - 17.00) See section 4 First aid measures.
Date of issue :	20 January 2021	
Date of previous issue :	1 July 2020.	

# **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Product definition :

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

Mixture

Kin Irrit. 2, H315SKIN CORROSION/IRRITATIONEye Irrit. 2, H319SERIOUS EYE DAMAGE/ EYE IRRITATIONSkin Sens. 1, H317SKIN SENSITIZATIONAquatic Chronic 2, H411AQUATIC HAZARD (LONG-TERM)See Section 11 for more detailed information on health effects and symptoms.

## 2.2 Label elements

Hazard pictograms :



Signal word :	Warning
Hazard statements :	H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. 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 :	$\overline{W}$ ear protective gloves. Wear eye or face protection. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.
Response :	Collect spillage. Take off contaminated clothing and wash it before reuse. 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. If eye irritation persists: Get medical advice or attention.
Disposal :	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients :	Fisphenol A-(epichlorhydrin) epoxy resin MW =< 700 formaldehyde, polymer with (chloromethyl)oxirane and phenol 1,6-hexanediol diglycidylether oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
Supplemental label elements :	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Contains epoxy constituents. May produce an allergic reaction.



# **SECTION 2: Hazards identification**

#### Special packaging requirements

Containers to be fitted with child- resistant fastenings :	Not applicable.
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) No. 1272/2008 [CLP]	Туре
<b>pi</b> sphenol A-(epichlorhydrin) epoxy resin MW =< 700	REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 1675-54-3 Index: 603-074-00-8	≥25 - ≤50	Skin Irrit. 2, H315 - Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[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] [2] [*]
formaldehyde, polymer with (chloromethyl)oxirane and phenol	REACH #: 01-2119454392-40 EC: 500-006-8 CAS: 9003-36-5	≥10 - ≤25	Skin Irrit. 2, H315 - Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
1,6-hexanediol diglycidylether	REACH #: 01-2119463471-41 EC: 240-260-4 CAS: 16096-31-4	≥5 - ≤10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
oxirane, mono[ (C12-14-alkyloxy)methyl] derivs.	REACH #: 01-2119485289-22 EC: 271-846-8 CAS: 68609-97-2 Index: 603-103-00-4	≥5 - ≤10	Skin Irrit. 2, H315 Skin Sens. 1, H317	[1]
bis(isopropyl)naphthalene	REACH #: 01-2119565150-48 EC: 254-052-6 CAS: 38640-62-9	≥5 - ≤10	Asp. Tox. 1, H304 - Aquatic Chronic 1, H410 (M=1)	[1]
C12-14 alcohols	EC: 279-420-3 CAS: 80206-82-2	≤0.3	Skin Irrit. 2, H315 - Aquatic Acute 1, H400 (M=1) See Section 16 for the full text of the H statements declared above.	[1]

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.

#### Туре

Substance classified with a health or environmental hazard

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

[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

[\*] 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 diameter ≤ 10 µm not bound within a matrix.

## **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.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If unconscious, place in recovery position and seek medical advice.
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.



# **SECTION 4: First aid measures**

0	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.
	No action shall be taken involving any personal risk or without suitable training. 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 irritation.
Inhalation :	No known significant effects or critical hazards.
Skin contact :	Causes skin irritation. 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 or irritation watering redness
Inhalation :	No specific data.
Skin contact :	Adverse symptoms may include the following: irritation redness
Ingestion :	No specific data.

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

Notes to physician :	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	In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic
mixture :	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 halogenated compounds metal oxide/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.

## SECTION 6: Accidental release measures

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

Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training.

#### 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. May be harmful to the environment if released in large quantities.



# **SECTION 6: Accidental release measures**

## 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

Contains epoxy constituents. Avoid all possible skin contact with epoxy and amine containing products, they may cause allergic reactions. 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.	

#### Recommended monitoring procedures

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 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
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	DNEL	Long term Dermal	8.33 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12.25 mg/m <sup>3</sup>	Workers	Systemic
formaldehyde, polymer with (chloromethyl) oxirane and phenol	DNEL	Long term Dermal	104.15 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	29.39 mg/m <sup>3</sup>	Workers	Systemic
1,6-hexanediol diglycidylether	DNEL	Long term Dermal	2.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.44 mg/m <sup>3</sup>	Workers	Systemic
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	DNEL	Long term Dermal	3.9 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	13.8 mg/m <sup>3</sup>	Workers	Systemic

### Predicted effect concentrations



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

Product/ingredient name	Compartment Detail	Value	Method Detail
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Fresh water	0.006 mg/l	-
	Marine	0.0006 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0.996 mg/l	-
	Marine water sediment	0.0996 mg/l	-
	Soil	0.196 mg/l	-
formaldehyde, polymer with (chloromethyl) oxirane and phenol	Fresh water	0.003 mg/l	-
	Marine water	0.0003 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0.294 mg/kg dwt	-
	Marine water sediment	0.0294 mg/kg dwt	-
	Soil	0.237 mg/kg dwt	-
1,6-hexanediol diglycidylether	Fresh water	0.0115 mg/l	-
	Fresh water sediment	0.283 mg/kg dwt	-
	Marine water	0.00115 mg/l	-
	Marine water sediment	0.0283 mg/kg dwt	-
	Soil	0.223 mg/kg dwt	-
	Sewage Treatment Plant	1 mg/l	-
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Fresh water	0.0072 mg/l	-
	Marine water	0.00072 mg/l	-
	Fresh water sediment	66.77 mg/kg dwt	-
	Marine water sediment	6.677 mg/kg dwt	-
	Soil	80.12 mg/kg dwt	-
	Sewage Treatment Plant	10 mg/l	-
pis(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	-

# 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.
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.
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.
	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:
	Short term exposure: natural rubber (latex) Recommended: Silver Shield / Barrier / 4H gloves, butyl rubber, Viton® May be used: polyvinyl alcohol (PVA), polyvinyl chloride (PVC), nitrile rubber, neoprene rubber
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. Wear appropriate respirator when ventilation is inadequate. Be sure to use approved/certified respirator or equivalent. It is not possible to specify precise filter type, since the actual work situation is unknown. Supplier of respirators should be contacted in order to find the appropriate filter.



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

### **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 :	Cream
Odor :	Amine-like.
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	-16°C This is based on data for the following ingredient: bisphenol A-(epichlorhydrin) epoxy resin MW $=$ < 700
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 143°C (289.4°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Not available.
Lower and upper explosive (flammable) limits :	No specific data.
Vapor pressure :	0 kPa This is based on data for the following ingredient: bisphenol A-(epichlorhydrin) epoxy resin MW = < 700
Vapor density :	Testing not relevant or not possible due to nature of the product.
Specific gravity :	1.343 g/cm <sup>3</sup>
Solubility(ies) :	Insoluble in the following materials: cold water and hot water.
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Testing not relevant or not possible due to nature of the product.
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 :	Testing not relevant or not possible due to nature of the product.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.
9.2 Other information	

Solvent(s) % by weight :	Weighted average: 1 %
Water % by weight :	Weighted average: 0 %
VOC content :	10.9 g/l
VOC content, Ready-for-use mixture :	<mark>34</mark> g/l
TOC Content :	Weighted average: 8 g/l
Solvent Gas :	Weighted average: 0.002 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

No specific data.



# **SECTION 10: Stability and reactivity**

10.5 Incompatible 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 halogenated compounds metal oxide/oxides

# **SECTION 11: Toxicological information**

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

Epoxy and amine containing products can cause skin disorders such as allergic eczema. The allergy may arise after only a short exposure period.

## Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
psphenol A-(epichlorhydrin) epoxy resin MW =< 700	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	
	LD50 Oral	Rat	>2000 mg/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.8 mg/l	- 4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	4 110015
	LD50 Oral	Rat	00	-
former all designs and many second the			>5000 mg/kg	-
formaldehyde, polymer with (chloromethyl)oxirane and phenol	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
1,6-hexanediol diglycidylether	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	2190 mg/kg	-
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	LD50 Dermal	Rat	>4500 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
bis(isopropyl)naphthalene	LD50 Dermal	Rat	>4000 mg/kg	-
	LD50 Oral	Rat	>4000 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
1,6-hexanediol diglycidylether	2190				

# Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
pisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Eyes - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent
formaldehyde, polymer with (chloromethyl)oxirane and phenol	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters
1,6-hexanediol diglycidylether	Skin - Irritant	Rabbit	-	-
	Eyes - Irritant	Rabbit	-	-
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	Eyes - Mild irritant	Rabbit	-	-
	Skin - Moderate irritant	Rabbit	-	-

# Sensitizer

Product/ingredient name	Route of exposure	Species	Result
pisphenol A-(epichlorhydrin) epoxy resin MW =< 700	skin	Guinea pig	Sensitizing
1,6-hexanediol diglycidylether oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	skin skin	Guinea pig Guinea pig	Sensitizing Sensitizing

# **Mutagenic effects**

No known significant effects or critical hazards.

## Carcinogenicity

No known significant effects or critical hazards.

# Reproductive toxicity



# **SECTION 11: Toxicological information**

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

Sensitization :

Contains bisphenol A-(epichlorhydrin) epoxy resin MW =< 700, formaldehyde, polymer with (chloromethyl)oxirane and phenol, 1,6-hexanediol diglycidylether, oxirane, mono[(C12-14-alkyloxy) methyl] derivs.. May produce an allergic reaction.

## 11.2 Information on other hazards

Endocrine disrupting properties :	No known data avaliable in our database.
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
prsphenol A-(epichlorhydrin) epoxy resin MW =< 700	Acute EC50 >11 mg/l	Algae	72 hours
	Acute EC50 2.1 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 3.1 mg/l	Fish - fathead minnow (Pimephales promelas)	96 hours
titanium dioxide	Acute LC50 >100 mg/l	Daphnia ´	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
formaldehyde, polymer with (chloromethyl)oxirane and phenol	Acute EC50 2.54 mg/l	Fish	96 hours
	Acute LC50 1.8 mg/l	Algae	72 hours
	Acute LC50 2.55 mg/l	Daphnia	48 hours
1,6-hexanediol diglycidylether	Acute EC50 23.1 mg/l	Algae	48 hours
	Acute LC50 47 mg/l	Daphnia	48 hours
	Acute LC50 30 mg/l	Fish	96 hours
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	Acute IC50 843.75 mg/l	Algae	72 hours
	Acute LC50 5000 mg/l	Fish	96 hours
bis(isopropyl)naphthalene	Acute NOEC 0.013 mg/l	Daphnia	21 days

## 12.2 Persistence and degradability



# **SECTION 12: Ecological information**

Product/ingredient name	Test	Result	Dose	Inoculum
sphenol A-(epichlorhydrin) epoxy resin MW =< 700	OECD 302B Inherent Biodegradability: Zahn-Wellens/ EMPA Test	12 % - Not readily - 28 days	-	-
formaldehyde, polymer with (chloromethyl)oxirane and phenol	OECD 301B Ready Biodegradability - CO₂ Evolution Test	16 % - Not readily - 28 days	-	-
1,6-hexanediol diglycidylether	OECD 301D Ready Biodegradability - Closed Bottle Test	47 % - Inherent - 28 days	2 mg/l	-
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	-	87 % - Readily - 28 days	-	-
Product/ingredient name	Aquatic half-life	Photolysis	Biodeg	radability
Fisphenol A-(epichlorhydrin) epoxy resin MW =< 700 formaldehyde, polymer with	-	-	Not readily Not readily	
(chloromethyl)oxirane and phenol 1,6-hexanediol diglycidylether oxirane, mono[(C12-14-alkyloxy)	-	-	Inherent Readily	
methyl] derivs.			1 (oddiny	

## 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
p/sphenol A-(epichlorhydrin) epoxy resin MW =< 700	2.64 - 3.78	31	low
formaldehyde, polymer with (chloromethyl)oxirane and phenol	2.7	150	low
1,6-hexanediol diglycidylether	0.822	3.57	low
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3.77	160 - 263	low
bis(isopropyl)naphthalene	6.081	1800 - 6400	high

## 12.4 Mobility in soil

Soil/water partition coefficient	No known data avaliable in our database.
(K <sub>oc</sub> ) :	

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

No known data avaliable in our database.

### 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

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.



# **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	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700)	9	Ш	Yes.	This product is not regulated as a dangerous good when transported in sizes of $\leq 5$ L or $\leq 5$ kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
IMDG Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700)	9	III	Yes.	This product is not regulated as a dangerous good when transported in sizes of $\leq 5 \text{ L or} \leq 5 \text{ kg}$ , provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. <b>Emergency schedules</b> F-A, S-F
IATA Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700)	9	III	Yes.	This product is not regulated as a dangerous good when transported in sizes of $\leq 5$ L or $\leq 5$ kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

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

#### **15.2 Chemical Safety Assessment**



# **SECTION 16: Other information**

Abbreviations and acronyms :	EUH statement = CL RRN = REACH Regi DNEL = Derived No	, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] .P-specific Hazard statement istration Number				
Full text of abbreviated H statements :	H304 H315 H317 H319 H400 H410 H411 H412	May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.				
Full text of classifications [CLP/GHS] :	Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Carc. 2 Eye Irrit. 2 Skin Irrit. 2 Skin Sens. 1	AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1				
Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]						

Classification	Justification
SERIOUS EYE DAMAGE/ EYE IRRITATION SKIN SENSITIZATION	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.

# Safe Use of Mixture Information Hempel's High Protect II Base



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, local effect - Level II Skin Sens. 1, Eye Irrit. 2 , Asp. Tox. 1 or Solvent.
Sector(s) of use Product category(ies)	:	Industrial uses - Professional uses Coatings and paints, thinners, paint removers
Frouder category(les)	•	

# **Operational conditions**

Place of use

: Indoor or outdoor use

# **Risk management measures (RMM)**

Contributing	Process	Maximum duration	Ventilation		Respiratory	Eye	Hands
activity	category (ies)	duration	Type and air changes per hour				
Preparation of material for application	PROC05	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.
Loading of application equipment and handling of coated parts before curing	PROC08a	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.
Professional application of coatings by brush or roller	PROC10	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.
Professional application of coatings by spraying	PROC11	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 suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	None	None
Cleaning	PROC05	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.
Waste management	PROC08a	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.

See chapter 8 of this Safety Data Sheet for specifications.



The information in this Safe Use of Mixture Information (SUMI) sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the Safety Data Sheet (SDS) and the label of the product. No liability is accepted for any damage, no matter of what kind, which is a direct or indirect consequence of acts and/or decisions based on the contents of this document.