

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

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

1.1 Product identifier

Product name : Hemapadur Multi-Strength GF 35849 Base
Product identity : 3584927230
Product type : epoxy primer (base for multi-component product)

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

Field of application : Splash Zone, general
Ready-for-use mixture : 35840 = 35849 13.5 ltr / 95620 4.5 ltr
Identified uses : Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details : Hempel UK Ltd
Berwyn House, The Pavilions
Llantarnam Park
Cwmbran
South Wales NP44 3FD
Telephone: 01633 833600
hempel@hempel.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

01633 833600 (08.00 - 17.00)
See Section 4 of the safety data sheet (first aid measures).

Date of issue : 30 December 2022
Date of previous issue : No previous validation.

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]

Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION
Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/EYE IRRITATION
Skin Sens. 1, H317 SKIN SENSITISATION
Aquatic Chronic 2, H411 LONG-TERM (CHRONIC) AQUATIC HAZARD

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 :

Prevention : Wear protective gloves. Avoid release to the environment.

Response : Collect spillage.

Hazardous ingredients : bisphenol A-(epichlorhydrin) epoxy resin MW ≤ 700
1,6-hexanediol diglycidylether
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine

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.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

SECTION 2: Hazards identification

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 in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
bisphenol 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]
1,6-hexanediol diglycidylether	REACH #: 01-2119463471-41 EC: 240-260-4 CAS: 933999-84-9	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 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	≥5 - ≤10	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2	≥1 - ≤3	Carc. 2, H351 (inhalation)	[1] [*]
3-(2,3-epoxypropoxy) propyl trimethoxy silane	REACH #: 01-2119513212-58 EC: 219-784-2 CAS: 2530-83-8	≥1 - <3	Eye Dam. 1, H318	[1]
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0	<1	Skin Sens. 1B, H317	[1]
4,4'-isopropylidenediphenol	REACH #: 01-2119457856-23 EC: 201-245-8 CAS: 80-05-7 Index: 604-030-00-0	<0.1	Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above.	[1] [2] [3]

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

[1] Substance classified with a health or environmental hazard

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

[3] Substance of equivalent concern

[*] 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.

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 recognised 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.

SECTION 4: First aid measures

Protection of first-aiders : 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 : 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 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 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

SECTION 6: Accidental release measures

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 (see Section 13). Use spark-proof tools and explosion-proof equipment. 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

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
4,4'-isopropylidenediphenol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 2 mg/m ³ 8 hours.

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 and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

Product/ingredient name	Type	Exposure	Value	Population	Effects
bisphenol A-(epichlorhydrin) epoxy resin MW ≤ 700	DNEL	Long term Dermal	8.33 mg/kg bw/day	Workers	Systemic
1,6-hexanediol diglycidylether	DNEL	Long term Inhalation	12.25 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	6 mg/kg bw/day	Workers	Systemic
benzyl alcohol	DNEL	Long term Inhalation	10.57 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	22 mg/m ³	Workers	Systemic
3-(2,3-epoxypropoxy) propyl trimethoxy silane	DNEL	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	21 mg/kg bw/day	Workers	Systemic
4,4'-isopropylidenediphenol	DNEL	Long term Inhalation	147 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.031 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2 mg/m ³	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	-
1,6-hexanediol diglycidylether	Soil	0.196 mg/l	-
	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	-
benzyl alcohol	Soil	0.223 mg/kg dwt	-
	Sewage Treatment Plant	1 mg/l	-
	Soil	0.456 mg/kg wwt	Assessment Factors
	Sewage Treatment Plant	39 mg/l	Assessment Factors
	Sediment	5.27 mg/kg wwt	Assessment Factors
3-(2,3-epoxypropoxy) propyl trimethoxy silane	Marine water sediment	0.527 mg/kg wwt	Assessment Factors
	Marine	0.1 mg/l	Assessment Factors
	Fresh water	1 mg/l	Assessment Factors
	Fresh water	1 mg/l	-
	Marine	0.1 mg/l	-
2,6-dimethylheptan-4-one	Sediment	0.79 mg/kg dwt	-
	Soil	0.13 mg/kg dwt	-
	Sewage Treatment Plant	>10 mg/l	-
	Fresh water	0.03 mg/l	-
	Marine water	0.003 mg/l	-
bisphenol A	Fresh water sediment	0.46 mg/kg	-
	Marine water sediment	0.046 mg/kg	-
	Sewage Treatment Plant	2.55 mg/l	-
	Soil	0.0746 mg/kg	-
	Fresh water	0.018 mg/l	-
methanol	Marine water	0.016 mg/l	-
	Sewage Treatment Plant	320 mg/l	-
	Sediment	1.2 mg/kg	-
	Soil	3.7 mg/kg	-
	Fresh water	0.062 mg/l	-
	Marine water	0.0062 mg/l	-
	Fresh water sediment	0.22 mg/kg dwt	-
	Marine water sediment	0.022 mg/kg dwt	-
	Soil	0.0085 mg/kg dwt	-
	Sewage Treatment Plant	25 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 :	<p>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.</p> <p>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:</p> <p>Recommended: Silver Shield / Barrier / 4H gloves, Viton®</p> <p>May be used: polyvinyl alcohol (PVA), nitrile rubber, butyl rubber</p> <p>Short term exposure: neoprene rubber, natural rubber (latex), polyvinyl chloride (PVC)</p>

SECTION 8: Exposure controls/personal protection

Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product. Wear suitable protective clothing. Always wear protective clothing when spraying.
Respiratory protection :	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.
Colour :	Yellow.
Odour :	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: 86°C (186.8°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 %
Vapour pressure :	0 kPa This is based on data for the following ingredient: bisphenol A-(epichlorhydrin) epoxy resin MW = < 700
Vapour density :	Testing not relevant or not possible due to nature of the product.
Specific gravity :	1.318 g/cm ³
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Lowest known value: 400°C (752°F) (3-(2,3-epoxypropoxy) propyl trimethoxy silane).
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Testing not relevant or not possible 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.
Oxidising properties :	Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight :	Weighted average: 7 %
Water % by weight :	Weighted average: 0 %
VOC content :	25.1 g/l
TOC Content :	Weighted average: 19 g/l
Solvent Gas :	Weighted average: 0.023 m ³ /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.

10.5 Incompatible materials

Reactive or incompatible with the following materials: oxidising materials.

Slightly reactive or incompatible with the following materials: reducing 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 halogenated compounds 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.

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
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	LD50 Dermal	Rabbit	>2000 mg/kg	-
1,6-hexanediol diglycidylether	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
benzyl alcohol	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	2190 mg/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m ³	4 hours
	LD50 Oral	Rat	1230 mg/kg	-
3-(2,3-epoxypropoxy) propyl trimethoxy silane	LC50 Inhalation Dusts and mists	Rat	>6.8 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
4,4'-isopropylidenediphenol	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	5.3 mg/l	4 hours
	LD50 Dermal	Rat	4250 mg/kg	-
	LD50 Oral	Rat	7010 mg/kg	-
4,4'-isopropylidenediphenol	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	3250 mg/kg	-
	LD50 Oral	Rat	3250 mg/kg	-

Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapours) mg/l	Inhalation (dusts and mists) mg/l
Hemapadur Multi-Strength GF 35849 Base	19647.8			175.7	
1,6-hexanediol diglycidylether	2190				
benzyl alcohol	1230			11	
3-(2,3-epoxypropoxy) propyl trimethoxy silane	7010	4250			5.3
4,4'-isopropylidenediphenol	3250				

SECTION 11: Toxicological information

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Eyes - Mild irritant	Rabbit	-	72 hours 300 Micrograms Intermittent
1,6-hexanediol diglycidylether	Skin - Mild irritant	Rabbit	-	
	Eyes - Irritant	Rabbit	-	
	Skin - Irritant	Rabbit	-	
benzyl alcohol	Eyes - Visible necrosis	Rabbit	-	
	Skin - Mild irritant	Rabbit	-	
titanium dioxide	Skin - Mild irritant	Human	-	
3-(2,3-epoxypropoxy) propyl trimethoxy silane	Eyes - Irritant	Rabbit	-	
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Eyes - Mild irritant	Rabbit	-	
4,4'-isopropylidenediphenol	Skin - Mild irritant	Rabbit	-	
	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams

Sensitiser

Product/ingredient name	Route of exposure	Species	Result
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	skin	Guinea pig	Sensitising
1,6-hexanediol diglycidylether	skin	Guinea pig	Sensitising
3-(2,3-epoxypropoxy) propyl trimethoxy silane	skin	Guinea pig	Not sensitizing

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
4,4'-isopropylidenediphenol	Category 3		Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Product/ingredient name	Result
No known data available in our database.	

Information on likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
3-(2,3-epoxypropoxy) propyl trimethoxy silane	Sub-acute NOAEL Oral	Rat	500 mg/kg	28 days
	Sub-acute NOAEL Inhalation Dusts and mists	Rat	0.225 mg/kg	14 days

Sensitisation :

Contains bisphenol A-(epichlorhydrin) epoxy resin MW =< 700, 1,6-hexanediol diglycidylether, Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine. May produce an allergic reaction.

11.2 Information on other hazards

SECTION 11: Toxicological information

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
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Acute EC50 >11 mg/l	Algae	72 hours
1,6-hexanediol diglycidylether	Acute EC50 1.8 mg/l Acute LC50 2 mg/l Acute EC50 23.1 mg/l Acute LC50 47 mg/l Acute LC50 30 mg/l	Daphnia Fish Algae Daphnia Fish	48 hours 96 hours 48 hours 48 hours 96 hours
benzyl alcohol	Acute EC50 230 mg/l Acute LC50 770 mg/l Acute LC50 460 mg/l	Daphnia Algae Fish	48 hours 72 hours 96 hours
titanium dioxide	Acute LC50 >100 mg/l Acute LC50 >100 mg/l Acute EC50 324 mg/l	Daphnia Fish Daphnia	48 hours 96 hours 48 hours
3-(2,3-epoxypropoxy) propyl trimethoxy silane	Acute EC50 55 mg/l Acute EC50 >100 mg/l	Fish - Cyprinus carpio Algae	96 hours 72 hours
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Acute EC50 >10 mg/l Acute EC50 >10 mg/l Acute LC50 7.5 mg/l Chronic NOEC 0.8 mg/l Fresh water Chronic NOEC 0.2 - 20 ppb Fresh water	Daphnia Fish Fish Daphnia - Daphnia magna - Neonate Fish - Xiphophorus helleri - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 96 hours 96 hours 21 days 60 days

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	OECD 302B Inherent Biodegradability: Zahn-Wellens/EMPA Test	12 % - Not readily - 28 days	-	-
1,6-hexanediol diglycidylether	OECD 301D Ready Biodegradability - Closed Bottle Test	47 % - Inherent - 28 days	2 mg/l	-
benzyl alcohol	OECD 301A 301A Ready Biodegradability - DOC Die-Away Test OECD 301C 301C Ready Biodegradability - Modified MITI Test (I)	95 - 97 % - Readily - 21 days 92 - 96 % - Readily - 14 days	-	-
3-(2,3-epoxypropoxy) propyl trimethoxy silane	-	37 % - Not readily - 28 days	-	-
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	OECD 301D Ready Biodegradability - Closed Bottle Test	22 % - Not readily - 28 days	-	-
4,4'-isopropylidenediphenol	-	1 - 2 % - Not readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	-	-	Not readily
1,6-hexanediol diglycidylether	-	-	Inherent
benzyl alcohol	-	-	Readily
3-(2,3-epoxypropoxy) propyl trimethoxy silane	-	-	Not readily
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	-	-	Not readily
4,4'-isopropylidenediphenol	-	-	Not readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	2.64 - 3.78	31	low
1,6-hexanediol diglycidylether	0.822	3.57	low
benzyl alcohol	0.87	1.37	low
3-(2,3-epoxypropoxy) propyl trimethoxy silane	0.5	-	low
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	5.86	-	high
4,4'-isopropylidenediphenol	3.4	20 - 67	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : No known data available in our database.

Mobility : No known data available in our database.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	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 minimised wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

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





European waste catalogue (EWC) : 08 01 11*

Packaging



The generation of waste should be avoided or minimised 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  	III	Yes.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤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. Tunnel code (-)
IMDG Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700). (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700)	9  	III	Yes.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤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. Emergency schedules F-A, S-F

SECTION 14: Transport information

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 ≤5 L or ≤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.
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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 authorisation - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
4,4'-isopropylidenediphenol	Toxic to reproduction	Recommended	ED/01/2018	10/1/2019
4,4'-isopropylidenediphenol	Endocrine disrupting properties for human health	Recommended	ED/01/2018	10/1/2019
4,4'-isopropylidenediphenol	Endocrine disrupting properties for environment	Recommended	ED/01/2018	10/1/2019

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 :

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.
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.
H351 Suspected of causing cancer.
H360F May damage fertility.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

SECTION 16: Other information

Full text of classifications [CLP/GHS] :	Acute Tox. 4	ACUTE TOXICITY - Category 4
	Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
	Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
	Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
	Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
	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. 1B	REPRODUCTIVE TOXICITY - Category 1B
	Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
	Skin Sens. 1	SKIN SENSITISATION - Category 1
	Skin Sens. 1B	SKIN SENSITISATION - Category 1B
	STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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

Classification	Justification
SKIN CORROSION/IRRITATION	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION	Calculation method
SKIN SENSITISATION	Calculation method
LONG-TERM (CHRONIC) AQUATIC HAZARD	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 performance 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

Hemapadur Multi-Strength GF 35849 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
benzyl alcohol

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

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

Operational conditions

Place of use : Indoor or outdoor use

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			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	1 to 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Industrial application of coatings by spraying	PROC07	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear 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.

