Safety Data Sheet
Hemapadur Multi-Strength GF 35849 Base

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758 - United Kingdom (UK)

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, 000E4611
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 :	metal industry, ships and shipyards.
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)

UK: **01633 833600** (08.00 - 17.00)
Ireland: **01 809 2166** (National Poisons Information Centre, Monday-Sunday; 08:00-22:00)

See Section 4 of the safety data sheet (first aid measures).

Date of issue :	11 December 2025
Date of previous issue :	27 August 2025.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK 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
benzyl alcohol
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine

Supplemental label elements : 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 contains substances that are assessed to be an endocrine disruptor, refer to Section 3.2. 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	%	GB CLP Classification	Type
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	REACH #: 01-2119456619-26 EC: 216-823-5 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: 16096-31-4	≥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	≤10	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317	[1]
3-(2,3-epoxypropoxy) propyl trimethoxy silane	REACH #: 01-2119513212-58 EC: 219-784-2 CAS: 2530-83-8	<3	Eye Dam. 1, H318 Aquatic Chronic 3, H412	[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]

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 of equivalent concern - Endocrine disrupting properties
[3] Substance with carcinogenic, mutagenic or reproductive toxicity properties

SECTION 4: First aid measures

4.1 Description of first aid measures

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

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.

Skin contact : Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners. Remove contaminated clothing and shoes.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.

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

SECTION 4: First aid measures

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, CO_2, 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

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

6.2 Environmental precautions

Avoid dispersal of 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

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

SECTION 6: Accidental release measures

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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

Occupational exposure limits

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Biological exposure indices

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Recommended monitoring procedures

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

Derived effect levels

Product/ingredient name	Type - Population - Exposure	Value	Effects
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	DNEL - Workers - Long term - Dermal	8.33 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	12.25 mg/m³	Systemic
1,6-hexanediol diglycidylether	DNEL - Workers - Long term - Dermal	6 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	10.57 mg/m³	Systemic
benzyl alcohol	DNEL - Workers - Long term - Inhalation	22 mg/m³	Systemic
	DNEL - Workers - Long term - Dermal	8 mg/kg bw/day	Systemic
3-(2,3-epoxypropoxy) propyl trimethoxy silane	DNEL - Workers - Long term - Dermal	10 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	70.5 mg/m³	Systemic
4,4'-isopropylidenediphenol	DNEL - Workers - Long term - Dermal	0.031 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	2 mg/m³	Systemic

Predicted effect concentrations

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail	Value
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
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
benzyl alcohol	Soil - Assessment Factors	0.456 mg/kg wwt
	Sewage Treatment Plant - Assessment Factors	39 mg/l
	Sediment - Assessment Factors	5.27 mg/kg wwt
	Marine water sediment - Assessment Factors	0.527 mg/kg wwt
	Marine - Assessment Factors	0.1 mg/l
	Fresh water - Assessment Factors	1 mg/l
3-(2,3-epoxypropoxy) propyl trimethoxy silane	Fresh water	0.45 mg/l
	Marine	0.045 mg/l
	Fresh water sediment	1.6 mg/kg
	Soil	0.063 mg/kg
	Sewage Treatment Plant	82 mg/l
	Marine water sediment	0.16 mg/kg
4,4'-isopropylidenediphenol	Fresh water	0.018 mg/l
	Marine water	0.016 mg/l
	Sewage Treatment Plant	320 mg/l
	Sediment	1.2 mg/kg
	Soil	3.7 mg/kg

8.2 Exposure controls

Appropriate engineering controls

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

Individual protection measures

General : Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.

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 chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, Viton®, butyl rubber (>0.5 mm)
Short term exposure: neoprene rubber (>0.1 mm), natural rubber (latex) (>0.4 mm), polyvinyl chloride (PVC), nitrile rubber (>0.1 mm)
May be used: polyvinyl alcohol (PVA), nitrile rubber (>0.3 mm), butyl rubber (>0.3 mm)

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.
Wear suitable protective clothing. Always wear protective clothing when spraying.

SECTION 8: Exposure controls/personal protection

Respiratory protection : When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. (EN140) Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Colour : Yellow.

Odour : Amine-like.

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

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

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

Flash point : Closed cup: 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.

Vapour pressure :

	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
1,6-hexanediol diglycidylether	<0.075	<0.01				

Vapour density : Not available.

Specific gravity : 1.32 g/cm³

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

Auto-ignition temperature :

Ingredient name	°C	°F	Method
pigment yellow 194, 11785 (benzimidazolone pigment)	280	536	

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 : 25.2 g/l

TOC Content : Weighted average: 20 g/l

Solvent Gas : Weighted average: 0.023 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.

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	Dose / Exposure	Effects
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Rat - Oral - LD50	>2000 mg/kg	
	Rabbit - Dermal - LD50	>2000 mg/kg	
	Rat - Dermal - LD50	>2000 mg/kg	
1,6-hexanediol diglycidylether	Rat - Dermal - LD50	>2000 mg/kg	
	Rat - Oral - LD50	2190 mg/kg	
benzyl alcohol	Rat - Oral - LD50	1230 mg/kg	
	Rat - Inhalation - LC50 Dusts and mists	>4178 mg/m³ [4 hours]	
3-(2,3-epoxypropoxy) propyl trimethoxy silane	Rat - Dermal - LD50	4250 mg/kg	
	Rat - Oral - LD50	7010 mg/kg	
	Rat - Inhalation - LC50 Dusts and mists	5.3 mg/l [4 hours]	
4,4'-isopropylidenediphenol	Rat - Oral - LD50	3250 mg/kg	
	Rabbit - Dermal - LD50	>2000 mg/kg	
	Rat - Oral - LD50	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	19209.6				
1,6-hexanediol diglycidylether	2190				
benzyl alcohol	1200				
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	Exposure
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Rabbit - Eyes - Mild irritant Rabbit - Skin - Mild irritant		
1,6-hexanediol diglycidylether	Rabbit - Skin - Irritant Rabbit - Eyes - Irritant		
benzyl alcohol	Rabbit - Eyes - Visible necrosis Rabbit - Skin - Mild irritant		
3-(2,3-epoxypropoxy) propyl trimethoxy silane	Rabbit - Eyes - Irritant		
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Rabbit - Skin - Mild irritant Rabbit - Eyes - Mild irritant		
4,4'-isopropylidenediphenol	Rabbit - Eyes - Severe irritant Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 250 Micrograms Amount/concentration applied: 500 milligrams

Sensitiser

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

Mutagenic effects

No known data avaliable in our database.

Carcinogenicity

No known data avaliable in our database.

Reproductive toxicity

No known data avaliable in our database.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
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 avaliable in our database.			

Aspiration hazard

Product/ingredient name	Result
No known data avaliable 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 - Rat - Oral - NOAEL OECD 407 [Repeated Dose 28-day Oral Toxicity Study in Rodents] 500 mg/kg [28 days] Sub-acute - Rat - Inhalation - NOAEL OECD 412 [Repeated Dose Inhalation Toxicity: 28-day or 14-day Study] 0.225 mg/kg [14 days]	Sub-acute - Rat - Oral - NOAEL Sub-acute - Rat - Inhalation - NOAEL	500 mg/kg [28 days] 0.225 mg/kg [14 days]	

11.2 Information on other hazards

SECTION 11: Toxicological information

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	Algae	11 mg/l [72 hours]
	Acute - LC50	Fish	2 mg/l [96 hours]
	Acute - EC50	Daphnia	1.8 mg/l [48 hours]
1,6-hexanediol diglycidylether	Acute - LC50	Fish	30 mg/l [96 hours]
	Acute - LC50	Daphnia	47 mg/l [48 hours]
	Acute - EC50	Algae	23.1 mg/l [48 hours]
benzyl alcohol	Acute - LC50	Fish	460 mg/l [96 hours]
	Acute - EC50	Daphnia	230 mg/l [48 hours]
	Acute - IC50	Algae	770 mg/l [72 hours]
3-(2,3-epoxypropoxy) propyl trimethoxy silane	Acute - LC50	Fish - *Cyprinus carpio*	55 mg/l [96 hours]
	Acute - EC50	Daphnia	324 mg/l [48 hours]
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Acute - EC50	Fish	>10 mg/l [96 hours]
	Acute - EC50	Daphnia	>10 mg/l [48 hours]
	Acute - EC50	Algae	>100 mg/l [72 hours]
4,4'-isopropylidenediphenol	Chronic - NOEC - Fresh water	Fish - Green Swordtail - *Xiphophorus helleri* - Juvenile (Fledgling, Hatchling, Weanling)	0.2 - 20 ppb [60 days]
	Chronic - NOEC - Fresh water	Daphnia - Water flea - *Daphnia magna* - Neonate	0.8 mg/l [21 days]
	Acute - LC50	Fish	7.5 mg/l [96 hours]

12.2 Persistence and degradability

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

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

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

SECTION 12: Ecological information

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logKoc	Koc
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	3.3 - 3.6	1800 - 4400
1,6-hexanediol diglycidylether	2.7	497.492
benzyl alcohol	1.1	12.6442
3-(2,3-epoxypropoxy) propyl trimethoxy silane	2.4	266.308
4,4'-isopropylidenediphenol	3.2	1436.23

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	No	No	No	No	No	No	No
1,6-hexanediol diglycidylether	No	No	Yes	No	No	No	No
benzyl alcohol	No	No	Yes	No	No	No	No
3-(2,3-epoxypropoxy) propyl trimethoxy silane	No	No	Yes	No	No	No	No
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	No	No	N/A	No	No	No	No
4,4'-isopropylidenediphenol	No	No	No	No	No	No	No

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

12.5 Results of PBT and vPvB assessment

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

12.6 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

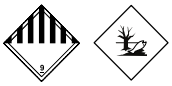
The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

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** (-)

SECTION 14: Transport information

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 ≤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
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.

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	9th recommendation	10/1/2019
4,4'-isopropylidenediphenol	Endocrine disrupting properties for human health	Recommended	9th recommendation	10/1/2019
4,4'-isopropylidenediphenol	Endocrine disrupting properties for environment	Recommended	9th recommendation	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

SECTION 16: Other information

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.
H335	May cause respiratory irritation.
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.
EUH430	May cause endocrine disruption in the environment.

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
ED ENV 1	ENDOCRINE DISRUPTOR FOR THE ENVIRONMENT - Category 1
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

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 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

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 section 8 of this Safety Data Sheet for specifications.