

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830 - United Kingdom (UK)

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

1.1 Product identifier

Product name :	Hempel's Profair Base
Product identity :	3529930540
Product type :	epoxy filler/putty (base for 2-component product)

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

Field of application :	yacht, ships and shipyards.
Ready-for-use mixture :	35290 = 35299 1 vol. / 98290 1 vol.
Identified uses :	Consumer applications, Professional applications.

1.3 Details of the supplier of the safety data sheet

1.3 Details of the supplier of the safety data sheet		1.4 Emergency telephone number		
Company details :	Hempel UK Ltd Berwyn House, The Pavilions	Emergency telephone number (with hours of operation)		
	Llantarnam Park Cwmbran South Wales NP44 3FD Telephone: 01633 833600 hempel@hempel.com	01633 833600 (08.00 - 17.00) See Section 4 of the safety data sheet (first aid measures).		
Date of issue :	2 July 2020			
Date of previous issue :	No previous validation.			

Date of previous issue :

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

Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/EYE IRRITATION Skin Sens. 1, H317 SKIN SENSITISATION LONG-TERM (CHRONIC) AQUATIC HAZARD Aquatic Chronic 2, H411 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 :	If medical advice is needed, have product container or label at hand. Keep out of reach of children.
Prevention :	Wear protective gloves/protective clothing/eye protection/face protection.
Response :	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical attention.
Disposal :	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients :	bis-[4-(2,3-epoxipropoxi)phenyl]propane ethyl hexyl glycidyl ether
Supplemental label elements :	Contains epoxy constituents. May produce an allergic reaction.
Special packaging requirements	



SECTION 2: Hazards identification

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
bis-[4-(2,3-epoxipropoxi)phenyl] propane ethyl hexyl glycidyl ether	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2 REACH #: 01-2119962196-31	≥50 - ≤75 ≥5 - ≤10	Skin Irrit. 2, H315 - Eye Irrit. 2, H319 - Skin Sens. 1, H317 - Aquatic Chronic 2, H411 - Skin Irrit. 2, H315 -	[1]
	EC: 219-553-6 CAS: 2461-15-6		Eye Irrit. 2, H319 Skin Sens. 1, H317 See Section 16 for the full text of the H statements declared above.	[.]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Туре

[1] 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

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.
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 effectsEye 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/symptomsFeature of the state of th



SECTION 4: First aid measures

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 ₂ , 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 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).

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). Contaminated absorbent material may pose the same hazard as the spill 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
bis-[4-(2,3-epoxipropoxi)phenyl]propane	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12.3 mg/m³	Workers	Systemic

Predicted effect concentrations

Product/ingredient name	Compartment Detail	Value	Method Detail
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Fresh water	3 µg/l	-
	Marine water	0.3 µg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0.5 mg/kg dwt	-
	Marine water sediment	0.1 mg/kg dwt	-
	Sediment	0.005 mg/kg dwt	-
	Soil	0.196 mg/kg dwt	-

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.



SECTION 8: Exposure controls/personal protection

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.
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.

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 :	Paste
Colour :	Blue.
Odour :	Amine-like.
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	10°C This is based on data for the following ingredient: bis-[4-(2,3-epoxipropoxi)phenyl]propane
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: >93.3°C (>199.9°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.
Vapour pressure :	0 kPa This is based on data for the following ingredient: bis-[4-(2,3-epoxipropoxi)phenyl]propane
Vapour density :	Testing not relevant or not possible due to nature of the product.
Specific gravity :	0.78 g/cm³
Solubility(ies) :	
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 :	Testing not relevant or not possible due to nature of the product.
Explosive properties :	Testing not relevant or not possible due to nature of the product.
Oxidising 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 :	11.5 g/l
VOC content, Ready-for-use mixture :	23.4 g/l

Weighted average: 10 g/l Weighted average: 0.003 m³/l

TOC Content :

Solvent Gas :



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: acids.

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 metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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
bis-[4-(2,3-epoxipropoxi)phenyl] propane	LD50 Dermal	Rabbit	20 g/kg	-
ethyl hexyl glycidyl ether	LD50 Oral	Rat	7800 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
bis-[4-(2,3-epoxipropoxi)phenyl]propane ethyl hexyl glycidyl ether	7800	20000			

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
bis-[4-(2,3-epoxipropoxi)phenyl] propane	Skin - Irritant	Rabbit	-	-
F F	Eyes - Irritant	Rabbit	-	-

Sensitiser

Product/ingredient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxi)phenyl]	skin	Mouse	Sensitising
propane			

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.



SECTION 11: Toxicological information

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs		
No known data avaliable in our database.					
pecific target organ toxicity (repeated exposure)					
pecific target organ toxicity (repeated exposure) Product/ingredient name	Category	Route of exposure	Target organs		

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

Sensitisation : Contains bis-[4-(2,3-epoxipropoxi)phenyl]propane, ethyl hexyl glycidyl ether. May produce an allergic reaction.

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
bis-[4-(2,3-epoxipropoxi)phenyl] propane	Acute EC50 9.4 mg/l	Algae	72 hours
	Acute EC50 2.1 mg/l Acute LC50 1.3 mg/l		48 hours 96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
bis-[4-(2,3-epoxipropoxi)phenyl] propane	OECD 301F Ready Biodegradability - Manometric Respirometry Test	5 % - Not readily - 28 days	-	-
Product/ingredient name	Aquatic half-life	Photolysis	Biodeg	radability
bis-[4-(2,3-epoxipropoxi)phenyl] propane	-	-	Not readily	

12.3 Bioaccumulative potential

No known data avaliable in our database.

12.4 Mobility in soil

Soil/water partition coefficient	No known data avaliable in our database.
(K _{oc}) :	
Mobility :	No known data avaliable in our database.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a 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.

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 no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bis-[4- (2,3-epoxipropoxi)phenyl]propane)	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.
IMDG Class	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (bis- [4-(2,3-epoxipropoxi)phenyl]propane)	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. Emergency schedules F-A, S-F
IATA Class	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bis-[4- (2,3-epoxipropoxi)phenyl]propane)	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 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

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



SECTION 15: Regulatory information

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 :	H315 H317 H319 H411	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.		
Full text of classifications [CLP/GHS] :	Aquatic Chronic 2 Eye Irrit. 2 Skin Irrit. 2 Skin Sens. 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - 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 SENSITISATION	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.