



Safety Data Sheet according to (EC) No 1907/2006

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PP LEAK FIX 180ML EN

SDS No. : 204976

V005.2

Revision: 19.03.2016

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Replaces version from: 18.03.2016

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

1.1. Product identifier

PP LEAK FIX 180ML EN

Contains:

Styrene

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

Intended use:

Sealant

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000

Fax-no.: +44 1442 278071

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Flammable liquids

Category 3

H226 Flammable liquid and vapor.

Skin irritation

Category 2

H315 Causes skin irritation.

Serious eye irritation

Category 2

H319 Causes serious eye irritation.

Toxic to reproduction

Category 2

H361d Suspected of damaging the unborn child.

Specific target organ toxicity - repeated exposure

Category 1

H372 Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:**Signal word:**

Danger

Hazard statement:

H226 Flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.

**Precautionary statement:
Prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P261 Avoid breathing vapours.
P281 Use personal protective equipment as required.

**Precautionary statement:
Response**

P302+P352 IF ON SKIN: Wash with plenty of water.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

None if used properly.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****General chemical description:**

Sealant

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Styrene 100-42-5	202-851-5 01-2119457861-32	10- 20 %	Flam. Liq. 3 H226 Acute Tox. 4 H332 Asp. Tox. 1 H304 Eye Irrit. 2 H319 Skin Irrit. 2 H315 STOT RE 1; Inhalation H372 Repr. 2 H361d Aquatic Chronic 3 H412 STOT SE 3 H335

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x) can be released.

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:

Do not inhale vapors and fumes., In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition.

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Wear protective equipment.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

For small spills wipe up with paper towel and place in container for disposal.

Wash spillage site thoroughly with soap and water or detergent solution.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not inhale vapors and fumes.
Avoid skin and eye contact.
Keep away from sources of ignition - no smoking.
Use only in well-ventilated areas.
See advice in section 8
Avoid open flames and sources of ignition.
No smoking.

Hygiene measures:

Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.
Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.
Store in a cool, well-ventilated place.
Temperatures between + 5 °C and + 35 °C
Keep away from sources of ignition.
Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

7.3. Specific end use(s)

Sealant

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, RESPIRABLE DUST]		1	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Styrene 100-42-5 [STYRENE]	250	1.080	Short Term Exposure Limit (STEL):		EH40 WEL
Styrene 100-42-5 [STYRENE]	100	430	Time Weighted Average (TWA):		EH40 WEL
Diiron trioxide 1309-37-1 [ROUGE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Diiron trioxide 1309-37-1 [ROUGE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Diiron trioxide 1309-37-1 [IRON OXIDE, FUME (AS FE)]		5	Time Weighted Average (TWA):		EH40 WEL
Diiron trioxide 1309-37-1 [IRON OXIDE, FUME (AS FE)]		10	Short Term Exposure Limit (STEL):		EH40 WEL

Occupational Exposure LimitsValid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, RESPIRABLE DUST]		0,8	Time Weighted Average (TWA):		IR_OEL
Talc (Mg ₃ H ₂ (SiO ₃) ₄) 14807-96-6 [TALC, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Limestone 1317-65-3 [CALCIUM CARBONATE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Styrene 100-42-5 [STYRENE]	40	170	Short Term Exposure Limit (STEL):		IR_OEL

Styrene 100-42-5 [STYRENE]	20	85	Time Weighted Average (TWA):		IR_OEL
Diiron trioxide 1309-37-1 [IRON OXIDE, FUME (AS FE)]		10	Short Term Exposure Limit (STEL):		IR_OEL
Diiron trioxide 1309-37-1 [ROUGE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Diiron trioxide 1309-37-1 [ROUGE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Diiron trioxide 1309-37-1 [IRON OXIDE, FUME (AS FE)]		5	Time Weighted Average (TWA):		IR_OEL

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Ensure adequate ventilation.

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.

Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance

paste

black

Odor

characteristic

Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	> 100,0 °C (> 212 °F)
Flash point	32 °C (89.6 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density (23 °C (73.4 °F))	1,6700 g/cm ³
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Insoluble
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

None if used properly.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Heat, flames, sparks and other sources of ignition.
Stable under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

None if used for intended purpose.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

STOT-repeated exposure:

Causes damage to organs through prolonged or repeated exposure.

Oral toxicity:

May cause irritation to the digestive tract.

Skin irritation:

Causes skin irritation.

Eye irritation:

Causes serious eye irritation.

Reproductive toxicity:

Suspected of damaging the unborn child.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Styrene 100-42-5	LD50	6.600 - 8.000 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Styrene 100-42-5	LC50	11,8 mg/l		4 h	rat	

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Styrene 100-42-5	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Styrene 100-42-5	not sensitising	Guinea pig maximisation test	guinea pig	Magnusson and Kligman Method

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Styrene 100-42-5	positive	sister chromatid exchange assay in mammalian cells	with and without		OECD Guideline 479 (Genetic Toxicology: In Vitro Sister Chromatid Exchange Assay in Mammalian Cells)
Styrene 100-42-5	negative	inhalation: vapour		mouse	

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequency of treatment	Route of application	Method
Styrene 100-42-5	not carcinogenic	rat	male/female	104 w 6 h/d, 5 d/w	inhalation: vapour	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Styrene 100-42-5	LOAEL=2.000 mg/kg	oral: gavage	daily (5 d/w)	rat	
Styrene 100-42-5	NOAEL=1.000 mg/kg	oral: gavage	daily (5 d/w)	rat	
Styrene 100-42-5		inhalation: vapour	4 w6 h/d, 5 d/w	rat	

SECTION 12: Ecological information**General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity**Ecotoxicity:**

Do not empty into drains / surface water / ground water.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Styrene 100-42-5	LC50	10 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Styrene 100-42-5	EC50	4,7 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Styrene 100-42-5	EC10	0,28 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)
	EC50	6,3 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)
Styrene 100-42-5	EC 50	500 mg/l	Bacteria	30 min		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Styrene 100-42-5	NOEC	1,01 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

12.2. Persistence and degradability**Persistence and Biodegradability:**

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Styrene 100-42-5	readily biodegradable	aerobic	87 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil**Mobility:**

Cured adhesives are immobile.

Bioaccumulative potential:

No data available for the product.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Styrene 100-42-5		74				
Styrene 100-42-5	2,96				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Styrene 100-42-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product disposal:

Collection and delivery to recycling enterprise or other registered elimination institution.

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information**14.1. UN number**

ADR	2055
RID	2055
ADN	2055
IMDG	2055
IATA	2055

14.2. UN proper shipping name

ADR	STYRENE MONOMER, STABILIZED (solution)
RID	STYRENE MONOMER, STABILIZED (solution)
ADN	STYRENE MONOMER, STABILIZED (solution)
IMDG	STYRENE MONOMER, STABILIZED (solution)
IATA	Styrene monomer, stabilized (solution)

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packing group

ADR	III
RID	III
ADN	III
IMDG	III
IATA	III

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable Tunnelcode: (D/E)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

When transporting as a set (component A and B) then the following dangerous good classification is used: UN 3269 Polyester resin kit, 3, III.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

VOC content (2010/75/EC)	7,9 %
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VOC Paints and Varnishes (EU):

Phase I (from 1.1.2007): 131,5 g/l

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H226 Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.



Safety Data Sheet according to Regulation (EC) No 1907/2006

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SDS No. : 205010
V007.0

Hardener 50% yellow 6g part B

Revision: 06.04.2018
printing date: 30.05.2018
Replaces version from: 15.02.2017

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

1.1. Product identifier

Hardener 50% yellow 6g part B

Contains:

Dibenzoyl peroxide

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

Intended use:
hardener component

1.3. Details of the supplier of the safety data sheet

Henkel Ltd
Wood Lane End
HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000
Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Organic peroxides	Type E
H242 Heating may cause a fire.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Acute hazards to the aquatic environment	Category 1
H400 Very toxic to aquatic life.	
Chronic hazards to the aquatic environment	Category 1
H410 Very toxic to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:**Signal word:**

Warning

Hazard statement:

H242 Heating may cause a fire.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement:

For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements

**Precautionary statement:
Prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement:
Response**

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

None if used properly.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****General chemical description:**

Hardener

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Dibenzoyl peroxide 94-36-0	202-327-6 01-2119511472-50	50- 54 %	Org. Perox. B H241 Eye Irrit. 2 H319 Skin Sens. 1 H317 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 M factor (Acute Aquat Tox): 10 M factor (Chron Aquat Tox): 10
Oxydipropyl dibenzoate 27138-31-4	248-258-5 01-2119529241-49	20- 25 %	Aquatic Chronic 3 H412

For full text of the H - statements and other abbreviations see section 16 "Other information".
 Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Immediately wash skin thoroughly with soap and water.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical advice.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.
Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

EYE: Irritation, conjunctivitis.

SKIN: Rash, Urticaria.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media:**

water, carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x) can be released.
Irritating vapours.

5.3. Advice for firefighters

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

Additional information:

In case of fire, keep containers cool with water spray., Do not inhale vapors and fumes.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

Remove sources of ignition.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

Wash spillage site thoroughly with soap and water or detergent solution.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not inhale vapors and fumes.
Avoid skin and eye contact.
Use only in well-ventilated areas.
Keep away from sources of ignition - no smoking.
See advice in section 8
Avoid open flames and sources of ignition.
No smoking.

Hygiene measures:

Good industrial hygiene practices should be observed.
Do not eat, drink or smoke while working.
Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from sources of ignition.
Store in a cool, well-ventilated place.
Refer to Technical Data Sheet

7.3. Specific end use(s)

hardener component

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Dibenzoyl peroxide 94-36-0 [DIBENZOYL PEROXIDE]		5	Time Weighted Average (TWA):		EH40 WEL
Zinc distearate 557-05-1 [ZINC DISTEARATE, INHALABLE DUST]		20	Short Term Exposure Limit (STEL):		EH40 WEL
Zinc distearate 557-05-1 [ZINC DISTEARATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Zinc distearate 557-05-1 [ZINC DISTEARATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Dibenzoyl peroxide 94-36-0 [DIBENZOYL PEROXIDE]		5	Time Weighted Average (TWA):		IR_OEL
Zinc distearate 557-05-1 [ZINC DISTEARATE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Zinc distearate 557-05-1 [ZINC DISTEARATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Zinc distearate 557-05-1 [ZINC DISTEARATE, TOTAL INHALABLE DUST]		20	Short Term Exposure Limit (STEL):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Dibenzoyl peroxide 94-36-0	aqua (freshwater)		0,000602 mg/l				
Dibenzoyl peroxide 94-36-0	aqua (marine water)		0,00006 mg/l				
Dibenzoyl peroxide 94-36-0	aqua (intermittent releases)		0,000602 mg/l				
Dibenzoyl peroxide 94-36-0	sewage treatment plant (STP)		0,35 mg/l				
Dibenzoyl peroxide 94-36-0	sediment (freshwater)				0,338 mg/kg		
Dibenzoyl peroxide 94-36-0	soil				0,0758 mg/kg		
Dibenzoyl peroxide 94-36-0	oral				6,67 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	aqua (freshwater)		0,0037 mg/l				
Oxydipropyl dibenzoate 27138-31-4	aqua (marine water)		0,00037 mg/l				
Oxydipropyl dibenzoate 27138-31-4	aqua (intermittent releases)		0,037 mg/l				
Oxydipropyl dibenzoate 27138-31-4	sediment (freshwater)				1,49 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	sediment (marine water)				0,149 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	soil				1 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	sewage treatment plant (STP)		10 mg/l				
Oxydipropyl dibenzoate 27138-31-4	oral				333 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	Air						

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Dibenzoyl peroxide 94-36-0	Workers	Inhalation	Long term exposure - systemic effects		11,75 mg/m3	
Dibenzoyl peroxide 94-36-0	Workers	dermal	Long term exposure - systemic effects		6,6 mg/kg	
Dibenzoyl peroxide 94-36-0	General population	Inhalation	Long term exposure - systemic effects		2,9 mg/m3	
Dibenzoyl peroxide 94-36-0	General population	dermal	Long term exposure - systemic effects		3,3 mg/kg	
Dibenzoyl peroxide 94-36-0	General population	oral	Long term exposure - systemic effects		1,65 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	Workers	dermal	Acute/short term exposure - systemic effects		170 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	Workers	Inhalation	Acute/short term exposure - systemic effects		35,08 mg/m3	
Oxydipropyl dibenzoate 27138-31-4	Workers	Inhalation	Long term exposure - systemic effects		8,8 mg/m3	
Oxydipropyl dibenzoate 27138-31-4	Workers	dermal	Long term exposure - systemic effects		10 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	dermal	Acute/short term exposure - systemic effects		80 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	Inhalation	Acute/short term exposure - systemic effects		8,7 mg/m3	
Oxydipropyl dibenzoate 27138-31-4	General population	oral	Acute/short term exposure - systemic effects		80 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	dermal	Long term exposure - systemic effects		0,22 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	Inhalation	Long term exposure - systemic effects		8,69 mg/m3	
Oxydipropyl dibenzoate 27138-31-4	General population	oral	Long term exposure - systemic effects		5 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; ≥ 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; ≥ 0.7 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Protective eye equipment should conform to EN166.

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Wear suitable protective clothing.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.

Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	paste paste white
Odor	Faint
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	Not applicable
Flash point	51 °C (123.8 °F); Supplier method
Evaporation rate	No data available / Not applicable
Flammability	No data available / Not applicable
Explosive limits	Not determined
Vapour pressure	No data available / Not applicable
Relative vapour density:	No data available / Not applicable
Density	1,2000 g/cm ³
0	
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative)	Partially soluble
(23 °C (73.4 °F); Solvent: Water)	
Partition coefficient: n-octanol/water	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Decomposition temperature	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with reducing agents.

Heavy metals.

Reacts with acids.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Heat, flames, sparks and other sources of ignition.

Store away from incompatible materials.

Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

None if used for intended purpose.

SECTION 11: Toxicological information

General toxicological information:

Prolonged or repeated contact may cause skin irritation.

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Dibenzoyl peroxide 94-36-0	LD50	> 5.000 mg/kg	rat	not specified
Oxydipropyl dibenzoate 27138-31-4	LD50	3.914 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Oxydipropyl dibenzoate 27138-31-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	LC50	> 24,3 mg/l	vapour	4 h	rat	not specified
Oxydipropyl dibenzoate 27138-31-4	LC50	> 200 mg/l		4 h	rat	not specified

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
Dibenzoyl peroxide 94-36-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Oxydipropyl dibenzoate 27138-31-4	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Oxydipropyl dibenzoate 27138-31-4	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Oxydipropyl dibenzoate 27138-31-4	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

Carcinogenicity

No data available.

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Oxydipropyl dibenzoate 27138-31-4	NOAEL P > 10000 ppm NOAEL F1 10000 ppm NOAEL F2 10000 ppm	Two generation study	oral: feed	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Oxydipropyl dibenzoate 27138-31-4	NOAEL > 1.000 mg/kg	oral: feed	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Aspiration hazard:

No data available.

SECTION 12: Ecological information

General ecological information:

Do not empty into drains / surface water / ground water.

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	LC50	0,06 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Oxydipropyl dibenzoate 27138-31-4	LC50	3,7 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	EC50	0,11 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Oxydipropyl dibenzoate 27138-31-4	EL50	19,3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	EC10	0,001 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	ErC50	0,071 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dibenzoyl peroxide 94-36-0	NOEC	0,02 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	EL50	4,9 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	NOELR	1 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	EC 50	35 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	EC50	> 100 mg/l	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Dibenzoyl peroxide 94-36-0	readily biodegradable	aerobic	71 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Oxydipropyl dibenzoate 27138-31-4	readily biodegradable	aerobic	85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential

No data available for the product.

Hazardous substances CAS-No.	Bioconcentration factor (BCF)	Exposure time	Temperature	Species	Method
Dibenzoyl peroxide 94-36-0	66,6			fish	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances CAS-No.	LogPow	Temperature	Method
Dibenzoyl peroxide 94-36-0	3,2	22 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Oxydipropyl dibenzoate 27138-31-4	3,9	20 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
Dibenzoyl peroxide 94-36-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Oxydipropyl dibenzoate 27138-31-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Incineration under controlled conditions is recommended.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information

14.1. UN number

ADR	3108
RID	3108
ADN	3108
IMDG	3108
IATA	3108

14.2. UN proper shipping name

ADR	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
RID	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
ADN	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
IMDG	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE) (Dipropylenglycol dibenzoate, Dibenzoyl peroxide)
IATA	Organic peroxide type E, solid (Dibenzoyl peroxide)

14.3. Transport hazard class(es)

ADR	5.2
RID	5.2
ADN	5.2
IMDG	5.2
IATA	5.2 (HEAT)

14.4. Packing group

ADR
RID
ADN
IMDG
IATA

14.5. Environmental hazards

ADR	Environmentally Hazardous
RID	Environmentally Hazardous
ADN	Environmentally Hazardous
IMDG	Marine pollutant
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable Tunnelcode: (D)
RID	not applicable
ADN	not applicable
IMDG	IMDG-Code: Segregation group 16- Peroxides
IATA	not applicable

When transporting as a set (component A and B) then the following dangerous good classification is used: UN 3269 Polyester resin kit, 3, III.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content < 3 %
(2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

- H241 Heating may cause a fire or explosion.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.