

# SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 1/8

## Flowseal PC Silk Hardener

 Revision 0  
 Revision date 2015-06-10

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

#### 1.1. Product identifier

Product name	Flowseal PC Silk Hardener
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#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Description	Restricted to professional users.  Component of a Two Pack Polyurethane Floor Seal.
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#### 1.3. Details of the supplier of the safety data sheet

Company	Virtus Resins
Address	The Shippon, Faenol Pentrecelyn Ruthin LL15 2SP
Web	www.epoxyresinsuppliers.co.uk
Telephone	+44 (0)1978 790 744
Fax	
Email	info@epoxyresinsuppliers.co.uk
Email address of the competent person	info@ epoxyresinsuppliers.co.uk

#### 1.4. Emergency telephone number

Emergency telephone number	+44 (0) 1978 790 744  8.30am to 5.00pm Mon - Fri
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC	Xn; R42/43 Xi; R36/37/38 R52/53 Symbols: Xn: Harmful.
Main hazards	Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2.1.2. Classification - EC 1272/2008	Asp. Tox. 1: H304; Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335; STOT SE 3: H336;

#### 2.2. Label elements

##### Hazard pictograms



##### Signal Word

Danger

##### Hazard Statement

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

# Flowseal PC Silk Hardener

Revision 0

Revision date 2015-06-10

## 2.2. Label elements

Precautionary Statement: Prevention	Skin Irrit. 2: H315 - Causes skin irritation. Eye Irrit. 2: H319 - Causes serious eye irritation. STOT SE 3: H335 - May cause respiratory irritation. STOT SE 3: H336 - May cause drowsiness or dizziness.
	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P310 - IF SWALLOWED: IF SWALLOWED: Immediately call a POISON CENTER/doctor/ . P302+P352 - IF ON SKIN: Wash with plenty of water/ . P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTER/doctor/ /if you feel unwell. P321 - Specific treatment (see on this label). P331 - Do NOT induce vomiting. P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.
Precautionary Statement: Storage	P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
1,2,4-Trimethylbenzene	601-043-00-3	95-63-6	202-436-9		10 - 20%	R10 Xn; R20 Xi; R36/37/38 N; R51/53	
4,4'-Diphenylmethane-diisocyanate	615-005-00-9	9016-87-9			1-10%		
1,3,5-Trimethylbenzene (Mesitylene)	601-025-00-5	108-67-8	203-604-4		1-10%	R10 Xi; R37 N; R51/53	
Propylbenzene	601-024-00-X	103-65-1	203-132-9		0.5 - 1%	R10 Xn; R65 Xi; R37 N; R51/53	

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
1,2,4-Trimethylbenzene	601-043-00-3	95-63-6	202-436-9		10 - 20%	Flam. Liq. 3: H226; Acute Tox. 4: H332; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Aquatic Chronic 2: H411;	
4,4'-Diphenylmethane-diisocyanate	615-005-00-9	9016-87-9			1-10%		
1,3,5-Trimethylbenzene (Mesitylene)	601-025-00-5	108-67-8	203-604-4		1-10%	Flam. Liq. 3: H226; STOT SE 3: H335; Aquatic Chronic 2: H411;	
Propylbenzene	601-024-00-X	103-65-1	203-132-9		0.5 - 1%	Flam. Liq. 3: H226; Asp. Tox. 1: H304; STOT SE 3: H335; Aquatic Chronic 2: H411;	

### Description

Two Pack Polyurethane Floor Seal.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or has stopped, administer artificial respiration. Give nothing by mouth. If unconscious place in recovery position
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# Flowseal PC Silk Hardener

Revision 0

Revision date 2015-06-10

## 4.1. Description of first aid measures

Eye contact	and seek medical advice. Rinse immediately with plenty of water also under eyelids for at least 20 minutes. Remove contact lenses. Immediate medical attention is required.
Skin contact	Remove affected person from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Ingestion	Rinse mouth thoroughly. Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if any discomfort continues.

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

Inhalation	No data is available on this product.
Eye contact	No data is available on this product.
Skin contact	No data is available on this product.
Ingestion	No data is available on this product.

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

Inhalation	No data is available on this product.
Eye contact	No data is available on this product.
Skin contact	No data is available on this product.
Ingestion	No data is available on this product.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

	Small Fires - Foam, carbon dioxide or dry powder. DO NOT use water if avoidable. Larger Fires: Water spray, fog or mist. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
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### 5.2. Special hazards arising from the substance or mixture

	Burning produces noxious and toxic fumes.
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### 5.3. Advice for firefighters

	Do not get water inside container. NOTE ! Use air-supplied respirators to protect against gases/fumes. Keep run-off water out of sewers and water sources. Dike for water control. Move container from fire area if it can be done without risk. If risk of water pollution occurs, notify appropriate authorities. Keep up-wind to avoid fumes.
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## SECTION 6: Accidental release measures

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

	Use personal protective clothing. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol.
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### 6.2. Environmental precautions

	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
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### 6.3. Methods and material for containment and cleaning up

	Contain and collect spillage with non-combustible absorbent materials, e.g sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose contaminated material as waste according to item 13.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

	Avoid exceeding the given occupational exposure limits (see section 8). Provide sufficient air exchange and/or exhaust in work rooms. Smoking, eating and drinking should be prohibited in the application area.
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### 7.2. Conditions for safe storage, including any incompatibilities

# Flowseal PC Silk Hardener

Revision 0  
Revision date 2015-06-10

## 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed.  
Never add water to this product.

## 7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Use engineering controls to reduce air contamination to permissible exposure level.  
Provide eyewash station.

#### 8.1.1. Exposure Limit Values

1,2,4-Trimethylbenzene	DIR: 2000/39	8hTWA ppm: 20
	8hTWA mg/m <sup>3</sup> : 100	STEL ppm: -
	STEL mg/m <sup>3</sup> : -	NOT: -
1,3,5-Trimethylbenzene (Mesitylene)	DIR: 2000/39	8hTWA ppm: 20
	8hTWA mg/m <sup>3</sup> : 100	STEL ppm: -
	STEL mg/m <sup>3</sup> : -	NOT: -

### 8.2. Exposure controls



#### 8.2.1. Appropriate engineering controls Eye / face protection

Provide adequate general and local exhaust ventilation.

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use chemical cartridge protection with appropriate cartridge. FILTER. Gas cartridge suitable for organic substances. Wear splash-proof eye goggles to prevent any possibility of eye contact. Contact lenses should not be worn when working with the chemical.

#### Skin protection - Hand protection

**GENERAL GUIDANCE ON HAND PROTECTION.** Chemical resistant gloves required for prolonged or repeated contact. Protective gloves must be used if there is a risk of direct contact or splash. **SPECIFIC RECOMMENDATIONS.** Use protective gloves made of: Nitrile or Neoprene.

### Further information

#### Other Protection

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of skin contact.

#### Hygiene Measures

Wash at the end of each work shift and before eating, smoking and using the toilet. **DO NOT SMOKE IN WORK AREA !.** Wash promptly if skin becomes contaminated. Change work clothing daily if contamination is reasonably probable. Promptly remove any clothing that becomes contaminated. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

## Flowseal PC Silk Hardener

Revision 0  
Revision date 2015-06-10

## 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Brown
Odour	smell of solvent
Odour threshold	No data available
pH	No data available
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Fat Solubility	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Solubility	No data available

## 9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

Stabel under recommended storage conditions.

## 10.2. Chemical stability

No decomposition if stored and applied as described.

## 10.3. Possibility of hazardous reactions

Stable under recommended storage conditions.

## 10.4. Conditions to avoid

Avoid contact with water. Avoid Heat, flames and other sources of ignition.

## 10.5. Incompatible materials

No data is available on this product.

## 10.6. Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

## SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

Acute toxicity	No data is available on this product.
Skin corrosion/irritation	No data is available on this product.
Serious eye damage/irritation	No data is available on this product.

# Flowseal PC Silk Hardener

Revision 0

Revision date 2015-06-10

## 11.1. Information on toxicological effects

Respiratory or skin sensitisation	No data is available on this product.
Germ cell mutagenicity	No data is available on this product.
Carcinogenicity	No data is available on this product.
Reproductive toxicity	No data is available on this product.

### 11.1.4. Toxicological Information

	No data available
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## SECTION 12: Ecological information

### 12.1. Toxicity

	No data available
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### 12.2. Persistence and degradability

	No data is available on this product.
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### 12.3. Bioaccumulative potential

### Partition coefficient

	Flowseal PC Silk Hardener No data available
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### 12.4. Mobility in soil

	No data is available on this product.
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### 12.5. Results of PBT and vPvB assessment

	No data is available on this product.
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### 12.6. Other adverse effects

	No data is available on this product.
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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

	Dispose of waste and residues in accordance with local authority requirements. Do not allow runoff sewer, waterway or ground.
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## SECTION 14: Transport information

### Hazard pictograms

	
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### 14.1. UN number

	UN1866
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### 14.2. UN proper shipping name

	RESIN SOLUTION
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### 14.3. Transport hazard class(es)

ADR/RID	3
Subsidiary risk	-
IMDG	3
Subsidiary risk	-
IATA	3
Subsidiary risk	-

## Flowseal PC Silk Hardener

Revision 0  
Revision date 2015-06-10

## 14.4. Packing group

Packing group	III
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## 14.5. Environmental hazards

Environmental hazards	No
Marine pollutant	No

## ADR/RID

Hazard ID	30
Tunnel Category	(D/E)

## IMDG

EmS Code	F-E S-E
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## IATA

Packing Instruction (Cargo)	366
Maximum quantity	220 L
Packing Instruction (Passenger)	355
Maximum quantity	60 L

## SECTION 15: Regulatory information

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

Regulations	"COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC".
	"REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC".
	R10 - Flammable. R36/37/38 - Irritating to eyes, respiratory system and skin. R40 - Limited evidence of a carcinogenic effect. R42/43 - May cause sensitisation by inhalation and skin contact. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 - Harmful: may cause lung damage if swallowed. S23 - Do not breathe gas/fumes/vapour/spray. S25 - Avoid contact with eyes. S36/37 - Wear suitable protective clothing and gloves. S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S57 - Use appropriate container to avoid environmental contamination. S60 - This material and its container must be disposed of as hazardous waste. S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

## 15.2. Chemical safety assessment

For advice on essential measures see sections 7 and 8 of this safety data sheet.
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## SECTION 16: Other information

## Other information

Text of risk phrases in Section 3	R10 - Flammable R20 - Harmful by inhalation. R36/37/38 - Irritating to eyes, respiratory system and skin. R37 - Irritating to respiratory system. R42/43 - May cause sensitisation by inhalation and skin contact.
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# Flowseal PC Silk Hardener

Revision 0

Revision date 2015-06-10

## Other information

Text of Hazard Statements in Section 3	R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 - Harmful: may cause lung damage if swallowed.
	Flam. Liq. 3: H226 - Flammable liquid and vapour. Skin Irrit. 2: H315 - Causes skin irritation. Eye Irrit. 2: H319 - Causes serious eye irritation. Acute Tox. 4: H332 - Harmful if inhaled. STOT SE 3: H335 - May cause respiratory irritation. Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects. Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

## General information

	This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy.
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## Further information

	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.
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