

according to 1907/2006/EC, Article 31

## **Flowseal PC Gloss Hardener**

Revision 0

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Revision date 2015-06-02

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SECTION 1: Identification	of the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	Flowseal PC Gloss Hardener
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.
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	info@ epoxyresinsuppliers.co.uk
competent person	
1.4. Emergency telephone nu	
Emergency telephone number	+44 (0)1978 790 744
	9.00am to 5.00pm Mon - Fri
<b>SECTION 2: Hazards ident</b>	ification
2.1. Classification of the subs	stance or mixture
2.1.1. Classification -	Xn; R42/43 Xi; R36/37/38 R52/53
1999/45/EC	Symbols: Xn: Harmful.
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	
SECTION 3: Composition/	information on ingredients
3.2. Mixtures	

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#### 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%	6 R10 Xn; R20 Xi; R36/37/38 N; R51/53	
4,4'-Diphenylmethane-diisocyanate	615-005-00-9	9016-87-9			1-10%	6	
1,3,5-Trimethylbenzene (Mesitylene)	601-025-00-5	108-67-8	203-604-4		1-10%	6 R10 Xi; R37 N; R51/53	
Propylbenzene	601-024-00-X	103-65-1	203-132-9		1-10%	6 R10 Xn; R65 Xi; R37 N; R51/53	

#### EC 1272/2008

			REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
	64742-95-6	265-199-0			Asp. Tox. 1: H304; STOT SE	
601-043-00-3	95-63-6	202-436-9			Flam. Liq. 3: H226; Acute Tox. 4: H332; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Aquatic	
615-005-00-9	9016-87-9				Chronic 2: H411;	
601-025-00-5	108-67-8	203-604-4			Flam. Liq. 3: H226; STOT SE 3: H335; Aquatic Chronic 2: H411;	
601-024-00-X	103-65-1	203-132-9			Flam. Liq. 3: H226; Asp. Tox. 1: H304; STOT SE 3: H335;	
	615-005-00-9 601-025-00-5	601-043-00-3 95-63-6 615-005-00-9 9016-87-9 601-025-00-5 108-67-8	601-043-00-3 95-63-6 202-436-9 615-005-00-9 9016-87-9 601-025-00-5 108-67-8 203-604-4	601-043-00-3 95-63-6 202-436-9 615-005-00-9 9016-87-9 601-025-00-5 108-67-8 203-604-4	601-043-00-3 95-63-6 202-436-9 615-005-00-9 9016-87-9 601-025-00-5 108-67-8 203-604-4	601-043-00-3 95-63-6 202-436-9 3: H335; STOT SE 3: H336;   601-043-00-3 95-63-6 202-436-9 Flam. Liq. 3: H226; Acute   Tox. 4: H332; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H319; STOT SE 3: H335;   615-005-00-9 9016-87-9 601-025-00-5 108-67-8 203-604-4   Flam. Liq. 3: H226; STOT SE 3: H335; Aquatic Chronic 2: H411;   601-024-00-X 103-65-1 203-132-9 Flam. Liq. 3: H226; Asp. Tox.

### Description

	Two Pack Polyurethane Floor Seal.	
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SECTION 4: First aid measured	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 and seek medical advice.		
Eye contact	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	s 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

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.
5.2. Special hazards arising fr	om the substance or mixture
	Burning produces noxious and toxic fumes.
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.
<b>SECTION 6: Accidental rele</b>	ease measures
6.1. Personal precautions, pro	otective equipment and emergency procedures
	Use personal protective clothing. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol.
6.2. Environmental precaution	IS
	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
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.
SECTION 7: Handling and	storage
7.1. Precautions for safe hand	lling
	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.
7.2. Conditions for safe storage	ge, including any incompatibilities
	Keep containers tightly closed.
	Never add water to this product.
7.3. Specific end use(s)	<u>.</u>
	The identified uses for this product are detailed in Section 1.2.
SECTION 8: Exposure cont	trols/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/m3: 100	STEL ppm: -
	STEL mg/m3: -	NOT: -
1,3,5-Trimethylbenzene	DIR: 2000/39	8hTWA ppm: 20
(Mesitylene)		
	8hTWA mg/m3: 100	STEL ppm: -
	STEL mg/m3: -	NOT: -

### 8.2. Exposure controls

#### 8.2. Exposure controls

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8.2.1. Appropriate engineering controls	Provide adequate general and local exhaust ventilation.
Eye / face protection	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 catridge 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

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
Flash 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	

9.2. Other information



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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	
	Stable 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	on products
	No hazardous decomposition products if stored and handled as prescribed/indicated.
SECTION 11: Toxicological	information
11.1. Information on toxicolog	jical 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.
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	า
	No data available
SECTION 12: Ecological in	formation
12.1. Toxicity	
	No data available
12.2. Persistence and degrada	ability
	No data is available on this product.
12.3. Bioaccumulative potenti	al
Partition coefficient	
	Flowseal PC Gloss Hardener No data available
12.4. Mobility in soil	

No data is available on this product.



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12.5. Results of PBT and vPv	B assessment
	No data is available on this product.
12.6. Other adverse effects	
	No data is available on this product.
SECTION 13: Disposal con	siderations
13.1. Waste treatment method	
	Dispose of waste and residues in accordance with local authority requirements. Do
	not allow runoff sewer, waterway or ground.
SECTION 14: Transport inf	
Hazard pictograms	
14.1. UN number	
	UN1866
14.2. UN proper shipping nam	
- F F F 7	RESIN SOLUTION
14.3. Transport hazard class(	
ADR/RID	3
Subsidiary risk	
IMDG	3
Subsidiary risk	1-
ΙΑΤΑ	3
Subsidiary risk	-
14.4. Packing group	
Packing group	
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
ΙΑΤΑ	
Packing Instruction (Cargo)	366
Maximum quantity	220 L
Packing Instruction	355
(Passenger) Maximum quantity	60 L
SECTION 15: Regulatory in	
15.1. Safety, health and enviro	onmental regulations/legislation specific for the substance or mixture

"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,



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

13.1. Galety, fieatth and enviro	
	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".
Regulations	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

15.2. Chemical safety assessment

For advice on essential measures see sections 7 and 8 of this safety data sheet.

### SECTION 16: Other information

Other information	
Text of risk phrases in	R10 - Flammable
Section 3	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.
	R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic
	environment.
	R65 - Harmful: may cause lung damage if swallowed.
Text of Hazard Statements in	Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Section 3	STOT SE 3: H335 - May cause respiratory irritation.
	STOT SE 3: H336 - May cause drowsiness or dizziness.
	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.
	Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
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.
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.