

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 1/8

Flowexpand V Hardener

Revision 1
Revision date 2016-02-17

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

1.1. Product identifier

Product name	Flowexpand V 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 Epoxy Jointing Compound.
--------------------	---

1.3. Details of the supplier of the safety data sheet

Company Address	Virtus Resins 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 790744 9.00am to 5.00pm Mon - Fri
-----------------------------------	--

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC	C; R34 Xn; R21/22-62-63 Xi; R43 N; R50/53 Symbols: C: Corrosive. N: Dangerous for the environment.
Main hazards	Harmful in contact with skin and if swallowed. Causes burns. May cause sensitisation by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of impaired fertility. Possible risk of harm to the unborn child.
2.1.2. Classification - EC 1272/2008	Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 1: H410;

2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Acute Tox. 4: H302 - Harmful if swallowed. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Flowexpand V Hardener

Revision 1
Revision date 2016-02-17

2.2. Label elements

Precautionary Statement: Prevention	Skin Sens. 1: H317 - May cause an allergic skin reaction. Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
	P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P272 - Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor/ /if you feel unwell. P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302+P352 - IF ON SKIN: Wash with plenty of water/ . P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P310 -Immediately call a POISON CENTER/doctor/ . P321 - Specific treatment (see on this label). P330 - Rinse mouth. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P363 - Wash contaminated clothing before reuse. P391 - Collect spillage.
Precautionary Statement: Storage	P405 - Store locked up.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to local and national regulations

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.
N-aminoethylpiperazine	612-105-00-4	140-31-8	205-411-0	01-2119471486-30	40 - 50% Xn; R21/22 C; R34 R43	R52/53	
Nonylphenol	601-053-00-8	25154-52-3	246-672-0	01-2119510715-45	40 - 50% Repr. Cat. 3; R62-63 Xn; R22 C; R34 N; R50/53		

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
N-aminoethylpiperazine	612-105-00-4	140-31-8	205-411-0	01-2119471486-30	40 - 50%	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412;	
Nonylphenol	601-053-00-8	25154-52-3	246-672-0	01-2119510715-45	40 - 50%	Repr. 2: H361fd; Acute Tox. 4: H302; Skin Corr. 1B: H314; Aquatic Acute 1: H400; Aquatic Chronic 1: H410;	

Description

Two Pack Epoxy Jointing Compound.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air.
Eye contact	Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

Flowexpand V Hardener

Revision 1

Revision date 2016-02-17

4.1. Description of first aid measures

Skin contact	Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Provided the patient is conscious, wash out mouth with water. Get medical attention if symptoms appear.

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

Inhalation	No data available.
Eye contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

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

	Alcohol-resistant foam, Carbon dioxide (CO ₂), Dry chemical, Dry sand, Limestone powder.
--	--

5.2. Special hazards arising from the substance or mixture

	May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from firefighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.
--	---

5.3. Advice for firefighters

	Avoid contact with skin. A face shield should be worn. Use personal protective equipment. Wear self-contained breathing apparatus for fire firefighting if necessary.
--	---

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.
--	---

6.2. Environmental precautions

	Construct a dike to prevent spreading.
--	--

6.3. Methods and material for containment and cleaning up

	Approach suspected leak areas with caution. Place in appropriate chemical waste container.
--	--

Further information

Additional advice	If possible, stop flow of product.
-------------------	------------------------------------

SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Do not get in eyes, on skin, on clothing. Avoid breathing vapour. Do not swallow. Avoid prolonged or repeated contact with skin. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. See section 8. EXPOSURE CONTROL AND PERSONAL PROTECTION.
--	---

Flowexpand V Hardener

Revision 1

Revision date 2016-02-17

7.2. Conditions for safe storage, including any incompatibilities

Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated area.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls



8.2.1. Appropriate engineering controls

Provide readily available eye wash stations and safety showers.
Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Eye / face protection

Full face shield with goggles underneath.

Skin protection - Handprotection

Butyl rubber gloves. Neoprene gloves. Nitrile rubber gloves. Impervious gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

Skin protection - Other

Impervious clothing.
Full rubber suit (rain gear).
Rubber or plastic boots.

8.2.3. Environmental exposure controls

Construct a dike to prevent spreading.

Further information

Special instructions for protection and hygiene.

Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Light (or pale) Amber
Odour	Fishy
Evaporation rate	No data available
Fat Solubility	No data available
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
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	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

Flowexpand V Hardener

Revision 1

Revision date 2016-02-17

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

Refer to possibility of hazardous reactions and/or incompatible materials sections.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data is available on this product.

10.4. Conditions to avoid

No data is available on this product.

10.5. Incompatible materials

Sodium hypochlorite.
 Organic acids (i.e. acetic acid, citric acid etc).
 Mineral acids.
 Product slowly corrodes copper, aluminium, zinc and galvanized surfaces.
 Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
 Reactive metal (e.g. sodium, calcium, zinc etc).
 Materials reactive with hydroxyl compounds.
 Oxidizing agents.

10.6. Hazardous decomposition products

Nitric acid
 Ammonia
 Nitrogen oxides (NOx).
 Nitrogen oxide can react with water to form corrosive nitric acid.
 Carbon monoxide.
 Carbon dioxide (CO2).
 Aldehydes.
 Flammable hydrocarbon fragments.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	No data is available on this product.
Skin corrosion/irritation	Harmful in contact with skin. Causes skin burns. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Serious eye damage/irritation	Causes eye burns. May cause blindness.
Respiratory or skin sensitisation	Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and stomach. Can cause severe eye, skin and respiratory tract burns.
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

Flowexpand V Hardener

Revision 1
Revision date 2016-02-17

11.1.4. Toxicological Information

No data available

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

Partition coefficient

Flowexpand V Hardener No data available

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6. Other adverse effects

No data is available on this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contact supplier if guidance is required.

Disposal of packaging

Dispose of this material and its container to hazardous or special waste collection point.

Further information

Further information on waste can be obtained from the document "Guidance on the Classification and Assessment of Waste, Technical guidance WM3.

SECTION 14: Transport information

Hazard pictograms



14.1. UN number

UN2735

14.2. UN proper shipping name

AMINES, LIQUID, CORROSIVE N.O.S.

14.3. Transport hazard class(es)

ADR/RID	8
Subsidiary risk	-
IMDG	8
Subsidiary risk	-
IATA	8

Flowexpand V Hardener

Revision 1
Revision date 2016-02-17

14.3. Transport hazard class(es)

Subsidiary risk	-
-----------------	---

14.4. Packing group

Packing group	III
---------------	-----

14.5. Environmental hazards

Environmental hazards	No
Marine pollutant	No

ADR/RID

Hazard ID	80
Tunnel Category	(E)

IMDG

EmS Code	F-A S-B
----------	---------

IATA

Packing Instruction (Cargo)	856
Maximum quantity	60 L
Packing Instruction (Passenger)	852
Maximum quantity	5 L

SECTION 15: Regulatory information

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

	<p>"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".</p> <p>"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".</p>
--	--

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

Revision	This document differs from the previous version in the following areas:. 2 - 2.1.2. Classification - EC 1272/2008. 2 - Hazard pictograms. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - Precautionary Statement: Disposal. 13 - Further information.
Text of risk phrases in Section 3	R21/22 - Harmful in contact with skin and if swallowed. R22 - Harmful if swallowed. R34 - Causes burns. R43 - May cause sensitisation by skin contact. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

Flowexpand V Hardener

Revision 1

Revision date 2016-02-17

Other information

Text of Hazard Statements in Section 3	<p>environment. R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R62 - Possible risk of impaired fertility. R63 - Possible risk of harm to the unborn child.</p> <hr/> <p>Acute Tox. 4: H302 - Harmful if swallowed. Acute Tox. 4: H312 - Harmful in contact with skin. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Sens. 1: H317 - May cause an allergic skin reaction. Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects. Repr. 2: H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child. Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.</p>
--	---

General information

	<p>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.</p>
--	---

Further information

	<p>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.</p>
--	---