

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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Flowrend LW Hardener

Revision 1
Revision date 2016-10-13

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

1.1. Product identifier

| | |
|---------------------|----------------------|
| Product name | Flowrend LW Hardener |
|---------------------|----------------------|

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

| | |
|--------------------|---|
| Description | Restricted to professional users. Component of a Three Pack Epoxy Coving Render. |
|--------------------|---|

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 |
|-----------------------------------|---|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

| | |
|---|---|
| 2.1.1. Classification - 1999/45/EC | C; R34 Xn; R20/22 Xi; R43 Symbols: C: Corrosive. |
| Main hazards | Harmful by inhalation and if swallowed. Causes burns. May cause sensitisation by skin contact. |
| 2.1.2. Classification - EC 1272/2008 | Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Acute Tox. 4: H332; Aquatic Chronic 4: H413; |

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. Skin Sens. 1: H317 - May cause an allergic skin reaction. Acute Tox. 4: H332 - Harmful if inhaled. Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life. |

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2.2. Label elements

| | |
|--|--|
| Precautionary Statement: Prevention | <p>P260 - Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p>P264 - Wash thoroughly after handling.</p> <p>P270 - Do not eat, drink or smoke when using this product.</p> <p>P271 - Use only outdoors or in a well-ventilated area.</p> <p>P272 - Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 - Avoid release to the environment.</p> <p>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</p> |
| Precautionary Statement: Response | <p>P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor/ /if you feel unwell.</p> <p>P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352 - IF ON SKIN: Wash with plenty of water/ .</p> <p>P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 -Immediately call a POISON CENTER/doctor/ .</p> <p>P312 - Call a POISON CENTER/doctor/ /if you feel unwell.</p> <p>P321 - Specific treatment (see on this label).</p> <p>P330 - Rinse mouth.</p> <p>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P363 - Wash contaminated clothing before reuse.</p> |
| Precautionary Statement: Storage | P405 - Store locked up. |
| Precautionary Statement: Disposal | P501 - Dispose of contents/container to local and national regulations |

2.3. Other hazards

| | |
|---------------|--------------------|
| Other hazards | No data available. |
|---------------|--------------------|

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. |
|--|--------------|-----------|-----------|--------------------------------------|--------------|---------------------------------|-----------|
| Benzyl alcohol | 603-057-00-5 | 100-51-6 | 202-859-9 | 01-2119492630-38 01-2119492630-38 | 30 - 40% | Xn; R20/22 | |
| 3-Aminomethyl-3,5,5-trimethylcyclohexylamine | 612-067-00-9 | 2855-13-2 | 220-666-8 | 01-2119965165-33 01-2119965165-33 | 10 - 20% | Xn; R21/22 C; R34 R43 R52/53 | |
| Benzene-1,3-dimethanamine | | 1477-55-0 | 216-032-5 | 01-2119480150-50 | 1 - 10% | C; R35 Xn; R20/22 | |
| Salicylic Acid | | 69-72-7 | 200-712-3 | 01-2119486984-17 | 1 - 10% | | |

EC 1272/2008

| Chemical Name | Index No. | CAS No. | EC No. | REACH Registration Number | Conc. (%w/w) | Classification | M-factor. |
|--|--------------|-----------|-----------|--------------------------------------|--------------|---|-----------|
| Benzyl alcohol | 603-057-00-5 | 100-51-6 | 202-859-9 | 01-2119492630-38 01-2119492630-38 | 30 - 40% | Acute Tox. 4: H332; Acute Tox. 4: H302; | |
| 3-Aminomethyl-3,5,5-trimethylcyclohexylamine | 612-067-00-9 | 2855-13-2 | 220-666-8 | 01-2119965165-33 01-2119965165-33 | 10 - 20% | Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412; | |

Further information

| | |
|--|---|
| | If REACH registration numbers do not appear the substance is either exempt from registration, does not meet the minimum volume threshold for registration, or the registration date has not yet come due. Refer to section 16 for full text of each relevant R-phrase and H-phrase. |
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SECTION 4: First aid measures

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4.1. Description of first aid measures

| | |
|--------------|---|
| Inhalation | Move the exposed person to fresh air. |
| Eye contact | Rinse immediately with plenty of water for 15 minutes holding the eyelids open. |
| Skin contact | In the event of skin contact, wipe off mechanically and wash affected areas thoroughly with soap and water. |
| Ingestion | Drink copious amounts of water and provide fresh air. Instantly call for doctor. |

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

| | |
|--------------|---|
| Inhalation | Seek medical attention if irritation or symptoms persist. |
| Eye contact | Irritating to eyes. |
| Skin contact | Irritating to skin. |
| Ingestion | Immediate medical attention is required. |

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

| | |
|-------------|---|
| Inhalation | Seek medical attention if irritation or symptoms persist. |
| Eye contact | Seek medical attention if irritation or symptoms persist. |
| Ingestion | Seek medical attention if irritation or symptoms persist. |

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--|--|
| | Carbon dioxide (CO ₂). Extinguishing media. Water jet. |
|--|--|

5.2. Special hazards arising from the substance or mixture

| | |
|--|---|
| | Formation of toxic gases is possible during heating or in case of fire. |
|--|---|

5.3. Advice for firefighters

| | |
|--|--|
| | Special protective equipment. Wear self-contained breathing apparatus and chemical-protective clothing. |
|--|--|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|--|------------------------------------|
| | Wear suitable protective clothing. |
|--|------------------------------------|

6.2. Environmental precautions

| | |
|--|--|
| | Do not allow runoff water to enter sewers or drains. Do not let product contaminate subsoil. |
|--|--|

6.3. Methods and material for containment and cleaning up

| | |
|--|-------|
| | Sand. |
|--|-------|

6.4. Reference to other sections

| | |
|--|---|
| | Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13. |
|--|---|

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--|------------------------------|
| | Store in original container. |
|--|------------------------------|

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


| | |
|--|--|
| | Are listed on the following items according to where it is going to be used. |
|--|--|

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8.2. Exposure controls

| | |
|---|--|
| |  |
| 8.2.1. Appropriate engineering controls | Ensure adequate ventilation of the working area. |
| Eye / face protection | safety glasses with side-shields. |
| Skin protection - Hand protection | Wear suitable gloves. |
| Skin protection - Other | Wear suitable protective clothing. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---------------------------|-------------------|
| Appearance | Liquid |
| Colour | Yellowish |
| Odour | Amine |
| Flash point | 100 |
| 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 |
| Melting point | No data available |
| Freezing Point | No data available |
| Initial boiling point | No data available |
| Solubility | No data available |

9.2. Other information

| | |
|----------------------------------|-------------------|
| Conductivity | No data available |
| Surface tension | No data available |
| Benzene Content | No data available |
| Lead content | No data available |
| VOC (Volatile organic compounds) | No data available |
| Gas group | Not applicable. |

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|--|--------------------|
| | No data available. |
|--|--------------------|

10.2. Chemical stability

| | |
|--|---|
| | This product is stable if stored and handled as prescribed/indicated. |
|--|---|

10.3. Possibility of hazardous reactions

| | |
|--|---------------------------------------|
| | No data is available on this product. |
|--|---------------------------------------|

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10.4. Conditions to avoid

No decomposition if used according to specifications.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

No data is available on this product.

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. |
| 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. |

SECTION 12: Ecological information

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

Partition coefficient

Flowrend LW 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

This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 91/869/EEC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residue materials additional evaluations may be required. Do not dump into any sewers, on the ground, or into any body of water.

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

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Hazard pictograms



14.1. UN number

UN2735

14.2. UN proper shipping name

AMINES, LIQUID, CORROSIVE N.O.S. (Contains isophoronediamine and 1,3-benzenedimethanamine)

14.3. Transport hazard class(es)

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

14.4. Packing group

Packing group III

14.5. Environmental hazards

| | |
|-----------------------|----|
| Environmental hazards | No |
| Marine pollutant | No |

14.6. Special precautions for user

Use in conjunction with Manufacturers recommended guidelines.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available.

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

"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".

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

"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".

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 | <p>This document differs from the previous version in the following areas:.</p> <ul style="list-style-type: none"> 2 - 2.1.2. Classification - EC 1272/2008. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Disposal. 3 - Further information. 7 - 7.3. Specific end use(s). 12 - 12.1. Toxicity. 13 - Further information. |
| Text of risk phrases in Section 3 | <p>R20/22 - Harmful by inhalation and if swallowed. R20 - Harmful by inhalation. R21/22 - Harmful in contact with skin and if swallowed. R22 - Harmful if swallowed. R34 - Causes burns. R41 - Risk of serious damage to eyes. R43 - May cause sensitisation by skin contact. R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> |
| Text of Hazard Statements in Section 3 | <p>Acute Tox. 4: H302 - Harmful if swallowed. Acute Tox. 4: H332 - Harmful if inhaled. 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.</p> |

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.