HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

FLORMAX 2

SIUII I Jaii Zu i J

1. PRODUCT AND COMPANY IDENTIFICATION

1.01 Product Code Flormax 2 - Two Pack Epoxy Paint for industrial use only

1.02 Manufacturer/Supplier Ultrimax Coatings Ltd

1.03 Address Shaw Lane Industrial Estate, Ogden Road, Doncaster, DN2 4SE

1.04 Contact www.ultrimaxcoatings.co.uk

 1.05 Phone Number
 01302 856666

 1.06 Fax Number
 01302 571510

 1.7 Emergency Phone Number
 01302 856666

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

FLAMMABLE LIQUIDS - Category 3 S KIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 LONG-TERM AQUATIC HAZARD - Category 3



Signal Word: Danger

Hazard statements

H226 - Flammable liquid and vapour.

H318 - Causes serious eye damage.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary Phrases

Obtain special instructions before use.
Keep away from heat/sparks/opn flames/hot surfaces. - No smoking
Keep container tightly closed
Wear protective gloves/protective clothing/eye protection/face protection.
Store in a well ventilated place. Keep cool
Avoid breathing vapours/spray









Page 2

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation: Preparation, a mixture of resins, pigments, additives and solvents

Ingredient name	identifyers	%	Classification	Туре
Epoxy resin mol wt 700-1100	CAS: 25068-38-6 EC: 500-033-5	>=25 - <35	H315 - Skin Irrit. 2 H319 - Eye Irrit. 2 H317 - Skin Sens. 1	[1]
Xylene	CAS: 1330-20-7 EC: 215-535-7	>=25 - <35	H226 - Flamm. Liq. 3 H312 - Acute Tox. 4 H332 - Acute Tox. 4 H315 - Skin Irrit. 2	[1][2]
Methyl Isobutyl Ketone	CAS: 108-10-1 EC: 203-550-1	>=10 - <15	H225 - Flamm Liq. 2 H332 - Acute Tox. 4 H319 - Eye Irrit. 2 H335 - STOT SE 3	[1][2]
Butan-1-ol	CAS: 71-36-3 EC: 200-751-6	< 10	H226 - Flamm. Liq. 3 H302 - Acute Tox. 4 H315 - Skin Irrit. 2 H318 - Eye Dam. 1 H335 - STOT SE 3 H336 - STOT SE 3	[1] [2]

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit, see section 8.
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

4. FIRST AID MEASURES

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical

attention.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary,

call a poison center or physician.

If unconscious, place in recovery position and get medical attention immediately. Maintain an

open airway. Loosen tight clothing such as a collar, tie, belt or waistband.



HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

Page:

4. FIRST AID MEASURES

Skin contact Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash

contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison centre or

physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion Get medical attention immediately. Call a poison center or physician. Wash out mouth with water.

Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar,

tie, belt or waistband.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected

that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear

gloves.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact: Causes serious eye damage.

Inhalation: May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following: pain, watering, redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following: pain or irritation, redness, blistering may occur

Ingestion: Adverse symptoms may include the following: stomach pains



HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

Page 4

4. FIRST AID MEASURES

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have

been ingested or inhaled.

Specific treatments: No specific treatment.

5. FIRE FIGHTING MEASURES

Suitable: In case of fire, use water spray, foam, dry chemical or CO2.

Not suitable: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide and carbon monoxide

5.3 Advice for firefighters

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Fire-fighting measures: Self-contained breathing apparatus.



HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

Page!

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures for non-emergency personnel

For emergency responders:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, if water-insoluble, absorb with an inert dry material, and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, if water-insoluble, absorb with an inert dry and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.



HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

Page (

7. HANDLING & STORAGE

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures:

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area.

Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Do not store in unlabelled containers.

7.3 Specific end use(s) Recommendations:

Not available.



Page 7

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	STD	TWA - 8 Hrs	STEL- 15 Mins	Notes
Xylene	WEL	50 ppm(Sk) 220mg/m3(Sk)	100ppm; 441mg/m ³	Sk
Methyl Isobutyl Ketone	WEL	208 mg/m, 50 ppm	100ppm; 416 mg/m ³	Sk
Butan-1-ol I	WEL		50 ppm; 154 mg/m ³	Sk

WEL = Workplace Exposure Limit.

Sk = absorbed through skin

Biological Limit Values

No information available

No information has been received from the manufacturers of the substance.

8.2. Exposure controls











Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit (WEL) is not exceeded. When mists or sprays are produced work under fume extraction. Ventilation systems and extraction facilities should be flame-proof.

Respiratory equipment

Wear suitable respiratory protection if vapours or mists are generated. When the concentration of atmospheric vapours is sufficient to cause skin irritation it is advisable to wear full face respiratory protection. Chemical respirator with organic vapour cartridge. Type A. Consult with the supplier as to the compatibility of the equipment with the chemical of concern. Respiratory protection should conform to the following standards. BS EN 136: Full face masks. BS EN 140: Half-face masks. CAUTION: Air purifying respirators do not protect the user in oxygen deficient atmospheres, use air supplied system. Powered air respirators should meet requirements of EN146 and EN12941.

Airline fed respirators should meet the requirements of EN 270 and EN 1835. When vapours are generated during spill clean up operations and exposure of operators is likely then respiratory equipment should be worn. Respiratory protection should be maintained in a proper condition and inspected at the frequency specified by current legislation.

Hand protection

Use protective gloves. Viton rubber (fluor rubber). Polyvinyl alcohol (PVA). For gloves involving total immersion 1.0mm thickness (if available) are recommended, at least 0.5mm and breakthrough time of >480 minutes. For splash resistance use minimum 0.5mm thickness and breakthrough time > 240 minutes. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Gloves showing signs of degradation should be changed to avoid skin contamination. When removing used gloves apply proper technique by avoiding skin contact with the outer surface. Gloves should carry the CE mark and conform to BS EN 374, chemicals and micro-organisms. When packages of the product are being handled during storage or transport it is advisable to wear protective gloves to prevent damage to the skin.

Eye protection

Wear approved chemical safety goggles conforming to EN 166.



HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

Page 8

Other Protection

Wear suitable protective clothing as protection against splashing or contamination. Provide eyewash station and safety shower. Wear plastic apron and full length gloves if handling large amounts. If there is a risk of splashing then wear a face shield. Wear suitable protective clothing during transport, handling and storage operations connected with the product. Wear suitable protective footwear during handling of the product. When treating spillages it is recommended to wear protective boots, consult with the supplier as to the compatibility. Wear anti-static footwear. Protective clothing should conform to the general requirements of EN 340:2003. Also consider EN 13034:2005; EN 14605:2005; EN 943:2002 dependent upon the situation resulting in exposure. Safety footwear should conform to standards EN 344 - 347. Have facilities in place to wash eyes in case of contact. If handling large amounts it is recommended to have a safety shower.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Remove clothing when contamination will result in exposure to the substance, segregate and wash before re-use. Do not eat, drink or smoke in the work area.

Environmental Exposure Controls

See section 6 for details. No chemical safety report or exposure scenarios are available.

9. PHYSICAL & CHEMICAL PROPERTIES

Decomposition temperature: Testing not relevant or not possible due to nature of the product.

Viscosity: Testing not relevant or not possible due to nature of the product.

Explosive properties : Highly explosive in the presence of the following materials or conditions: open flames, sparks and

static discharge and heat.

Oxidising properties: Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight: Weighted average: 33 % Water % by weight: Weighted average: 0 %

VOC content: 420 g/l VOC content, Ready-for-use mixture: 435 g/l

TOC Content: Weighted average: 347 g/l
Solvent Gas: Weighted average: 0.11 m /l

10. STABILITY & REACTIVITY

10.1. Reactivity

Can react with strong acids and oxidising agents.

10.2. Chemical stability

Stable when stored in sealed container at normal temperatures and in a suitable location. Evaporation will occur if the containers are not sealed correctly. Agitation of the substance in storage containers may produce a build up of electrostatic charge. Forms explosive mixtures with air.

10.3. Possibility of hazardous reactions

Hazardous reactions as specified in section 10.1. There will be immense pressure build up under explosive conditions causing sealed containers to rupture. Do not mix with materials known to cause hazardous reactions. May react violently or exothermically.

Hazardous Polymerisation - Will not polymerise.



HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

Page 9

10.4. Conditions to avoid

Avoid sources of heat and ignition. Avoid direct sunlight and moisture. Avoid storage with incompatible materials. Avoid storage in freezing conditions. Avoid storage near to unprotected drainage systems. It is advisable to store the product within some form of containment to prevent spillages reaching drainage systems. Situations that would produce vibration or agitation of the substance in storage containers as there is the potential to build up static charge, particularly in metal or compatible plastic containers. Do not allow the storage container to be left exposed to the atmosphere. Avoid storage in an unstable manner or in a situation that would result in exposure to the product.

10.5. Incompatible materials

Materials To Avoid:

Some plastics, rubber and coatings. Strong oxidising substances. Strong acids.

10.6. Hazardous decomposition products

See section 5 for hazardous combustion products.

11. TOXICOLOGICAL INFORMATION

Exposure to component solvent vapour concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting. Epoxy and amine containing products can cause skin disorders such as allergic eczema. The allergy may arise after only a short exposure period.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

General information

Any waste material is classed as hazardous waste, it should only be disposed of through licensed waste handlers and treatment sites. Do not allow unauthorized disposal to the environment. Avoid sources of ignition when handling waste. If operators are exposed to vapors during the disposal process then suitable respiratory protection should be worn. All other personal protective equipment as described in section 8 should be worn. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Waste material should not be disposed of directly to drain. Uncleaned empty containers should be treated as hazardous waste. Avoid unauthorized disposal. Do not dump illegally onto land or into water. Dispose of waste and residues in accordance with local authority requirements. The recommended method for treatment of waste residues is either reclamation or incineration by specialist disposal company. When dealing with waste always consider the waste management hierarchy of Prevention, Preparation for re-use, Recycling, Recovery and Disposal. It is advisable to minimize waste at source if possible, then re-use, recover or recycle wherever possible before considering waste disposal options.



HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

Page 10

14. TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN) 1263 UN No. (IMDG) 1263 UN No. (ICAO) 1263

14.2. UN proper shipping name

Proper Shipping Name: PAINT

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3 ADR/RID/ADN Class Class 3: Flammable liquids. ADR Label No. 3 IMDG Class 3 ICAO Class/Division 3

Transport Labels 14.4. Packing group

ADR/RID/ADN Packing group III IMDG Packing group III ICAO Packing group III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant: No.

14.6. Special precautions for user EMS F-E, S-D

Emergency Action Code 3Y

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available.

15. REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (CHIP 4) ECHA Guidance on the Compilation of SafetyData Sheets, September 2011.

EU Legislation

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, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EU) 453/2010.



HEALTH AND SAFETY DATA SHEET REF HS15 Version 1 Jan 2015

Page 11

16. OTHER INFORMATION

General information

This datasheet is not intended to be a replacement for a full risk assessment, these should always be carried out by competent persons.

Under REACH Material Safety Datasheets (MSDS) are referred to as Safety Datasheets (SDS).

Information Sources

Raw material safety data sheets. ECHA website. Health Protection Agency Information. Information in sections 8, 11 and 12 has been taken from the ECHA website - toxicological and ecotoxicological information.

Hazard Statements In Full

H226 - Flammable liquid and vapour.

H318 - Causes serious eye damage.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H335 May cause respiratory irritation.

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 process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability of such information for his own particular use.

