



SAFETY DATA SHEET

138/W224 - GUARD-COAT HARDENER FOR GREEN

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

1.1. Product identifier

Product name 138/W224 - GUARD-COAT HARDENER FOR GREEN

Product number 138/W224/15 - hardener for green

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

Identified uses HARDENER FOR TWO COMPONENT FLOOR COATING

1.3. Details of the supplier of the safety data sheet

Supplier

COO-VAR
Lockwood Street
Hull
HU2 0HN
+44 (0) 1482 328053(T)
+44 (0) 1482 219266(F)
info@coo-var.co.uk

Contact person Technical Department -, 08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri, as above

1.4. Emergency telephone number

Emergency telephone +44 (0) 1482 328053 (08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Human health The product contains a small amount of sensitising substance. May cause skin sensitisation or allergic reactions in sensitive individuals.

Physicochemical When handled correctly, undamaged units represent no danger.

2.2. Label elements

Precautionary statements EUH205 Contains epoxy constituents. May produce an allergic reaction.
EUH208 Contains . May produce an allergic reaction.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Chromic Oxide 10-30%		
CAS number: 1308-38-9	EC number: 215-160-9	REACH registration number: 01-211943395-39-xxxx
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -	
Barium Sulphate 1-5%		
CAS number: 7727-43-7	EC number: 231-784-4	REACH registration number: 01-2119491274-35-0001
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -	
Calcium Magnesium Silicate 1-5%		
CAS number: 14807-96-6	EC number: 238-877-9	
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -	
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE <1%		
CAS number: 2855-13-2	EC number: 220-666-8	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	Classification (67/548/EEC or 1999/45/EC) C;R34 Xn;R21/22 R43 R52/53	
m-phenylenebis(methylamine) <1%		
CAS number: 1477-55-0	EC number: 216-032-5	REACH registration number: 01-2119480150-50
Classification Acute Tox. 4 - H302 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	Classification (67/548/EEC or 1999/45/EC) Xn;R20/22. C;R34. R43,R52/53.	

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3-(Polyoxyethylene)propylheptamethyltrisiloxane		<1%
CAS number: 67674-67-3		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H332	Xn;R20. Xi;R41. N;R51/53.	
Eye Dam. 1 - H318		
Aquatic Chronic 2 - H411		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person.
Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if a large quantity has been ingested. Show this Safety Data Sheet to the medical personnel. Never give anything by mouth to an unconscious person. Do not induce vomiting. Do not induce vomiting.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

General information	Get medical attention promptly if symptoms occur after washing.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	The product is non-combustible. Toxic gases or vapours.
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5.3. Advice for firefighters

Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses. Avoid breathing fire gases or vapours.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Exclude non-essential personnel. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes.
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6.2. Environmental precautions

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Environmental precautions Avoid discharge to the aquatic environment. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Neutralise with dilute aqueous acid, such as acetic acid. Neutralisation reaction is exothermic. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid inhalation of vapours/spray and contact with skin and eyes. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Persons with a history of skin sensitisation problems should not be employed in a situation where skin contact with this product could occur, nor should those with asthma or similar disorders be exposed to the vapour or spray mist. The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep containers upright. Store in tightly closed original container in a dry and cool place.

Storage class Chemical storage.

7.3. Specific end use(s)

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

Occupational exposure limits

Chromic Oxide

Long-term exposure limit (8-hour TWA): 0.5 mg/m³

Barium Sulphate

Long-term exposure limit (8-hour TWA): 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): 4 mg/m³ respirable dust

Calcium Magnesium Silicate

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³

WEL = Workplace Exposure Limit

Chromic Oxide (CAS: 1308-38-9)

Ingredient comments WEL = Workplace Exposure Limits

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (CAS: 2855-13-2)

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DNEL	Professional - Inhalation; : 20.1 mg/m ³
PNEC	Professional - Fresh water; 0.06 mg/l Professional - Marine water; 0.006 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC). Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

Other skin and body protection

Wear appropriate clothing to prevent reasonably probable skin contact. Provide eyewash station.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid. Liquid
Colour	Yellowish
Odour	Ammonia.
pH	pH (concentrated solution): 8.9
Initial boiling point and range	>100°C @ 760 mm Hg
Flash point	°C Does not flash.
Other flammability	Not applicable.
Relative density	1.27 @ @ 20 C°C
Solubility(ies)	Soluble in water.
Viscosity	15000 - 25000 cP @ 25 C°C
Explosive properties	Not applicable.

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 0 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

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10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with the following materials: Acids. Oxidising agents.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion Irritating. Symptoms following overexposure may include the following: Nausea, vomiting. Stomach pain.

Skin contact Irritating to skin. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact Risk of serious damage to eyes. Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

Route of entry Inhalation Skin absorption. Ingestion. Skin and/or eye contact.

Toxicological information

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 1,840.0 mg/kg

Species Rat

m-phenylenebis(methylamine)

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 2,000.0 mg/kg

Species Rabbit

Skin contact Irritating to skin. May cause sensitisation by skin contact.

Eye contact Irritation of eyes and mucous membranes. Risk of serious damage to eyes.

SECTION 12: Ecological Information

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Ecotoxicity Dangerous for the environment if discharged into watercourses. The product contains a substance which may have adverse effects on waste water treatment processes. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

12.1. Toxicity

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Acute toxicity - fish	LC ₅₀ , 96 hours: 110 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 23 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 50 mg/l, Scenedesmus subspicatus

m-phenylenebis(methylamine)

Acute toxicity - fish	LC ₅₀ , > 96 hours: 100 mg/l, Brachydanio rerio (Zebra Fish) LC ₅₀ , > 96 hours: 100 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 16 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 12 mg/l, Scenedesmus subspicatus IC ₅₀ , 72 hours: mg/l, Fish

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

m-phenylenebis(methylamine)

Bioaccumulative potential	BCF: 2.69134803,
Partition coefficient	log Pow: 0.18

12.4. Mobility in soil

Mobility The product is partly miscible with water and may spread in the aquatic environment.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Avoid the spillage or runoff entering drains, sewers or watercourses. Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Avoid the spillage or runoff entering drains, sewers or watercourses. Environmental Manager must be informed of all major spillages.

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Waste class When this material, in its liquid state, as supplied, becomes a waste, it is categorised as a hazardous waste, with code 08 01 11* (EPOXY BASED LIQUID WASTE). Part-used containers, not drained and/or rigorously scraped out and containing residues of the supplied material, are categorised as hazardous waste, with code 08 01 11* (EPOXY BASED LIQUID WASTE). Neutralised empty packages, are categorised as non-hazardous waste, with code 15 01 02(plastic packaging) or 15 01 04 (metal packaging)

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Sea transport notes Not classified.

14.1. UN number

14.2. UN proper shipping name

Proper shipping name (ADR/RID) PAINT

Proper shipping name (IMDG) PAINT

Proper shipping name (ICAO) PAINT

Proper shipping name (ADN) PAINT

14.3. Transport hazard class(es)

IMDG class not classified

14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

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) (as amended).
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 (as amended).

Guidance Workplace Exposure Limits EH40.
CHIP for everyone HSG228.
Safety Data Sheets for Substances and Preparations.
Approved Classification and Labelling Guide (Sixth edition) L131.
Dangerous Substances and Explosive Atmospheres Regulations 2002 [L138]

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	Issued in new format for Reach compliance in accordance with EC 1272/2008 Issued in accordance with Annex II to REACH, as amended by Commission Regulation (EU) No. 453/2010
Issued by	Technical Dept. (P.E.)
Revision date	18/05/2015
Revision	3
Supersedes date	13/03/2013
SDS number	11276
SDS status	Approved.
Signature	Initials _____
Risk phrases in full	<p>Not classified.</p> <p>R20 Harmful by inhalation.</p> <p>R20/22 Harmful by inhalation and if swallowed.</p> <p>R21/22 Harmful in contact with skin and if swallowed.</p> <p>R34 Causes burns.</p> <p>R41 Risk of serious damage to eyes.</p> <p>R43 May cause sensitisation by skin contact.</p> <p>R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>
Hazard statements in full	<p>H302 Harmful if swallowed.</p> <p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage.</p> <p>H331 Toxic if inhaled.</p> <p>H332 Harmful if inhaled.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>

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 himself as to the suitability of such information for his own particular use.