

SECTION 1: Identification of the substance/mixture and of the company/undertaking	
1.1. Product identifier	r
Product name	Coppercoat Hardener
1.2. Relevant identifie	ed uses of the substance or mixture and uses advised against
Identified uses	Amine hardener for epoxy base - Coppercoat Antifouling
1.3. Details of the sup	oplier of the safety data sheet
Supplier	Aquarius Marine Coatings Ltd
	Unit 10 St Patrick's Industrial Estate
	Station Road
	Shillingstone
	Dorset

DT11 0SA Tel: 01258 861059 Email: info@coppercoat.com

1.4. Emergency telephone number

Emergency telephone +44(0)1258 861059 (Monday-Friday 09.00-17.00)

SECTION 2: Hazards identification

2.1. Classification of the substance or		
mixture Classification (EC 1272/2008)		
Physical hazards	Not Classified	
Health hazards	Skin Irrit. 2 - H315 Eye Dam. 1 -	

H318 Environmental hazards Not Classified

Classification (67/548/EEC o 1999/45/EC)	pr -
Human health	See Section 16 for the full text of the R phrases declared on this
section Environmental	See Section 16 for the full text of the R phrases declared on this
section	
2.2. Label	
elements	
Pictogram	

Signal word

Danger

Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage.
Precautionary statements	 P264 Wash contaminated skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. 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 medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.
Contains	Linseed oil, polymer w/ bis-A, bis-A diglycidyl ether, diethylenetriamine, formaldehyde, glycidyl Ph ether, pentaethylenehexamine

2.3. Other hazards

Not available.

SECTION 3: Composition/information on ingredients 3.2. Mixtures		
		Linseed oil, polymer w/ bis-A, bis- diethylenetriamine, formaldehyde, ether, pentaethylenehexamine CAS number: 68915-81-1
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318	Classification (67/548/EEC or 1999/45/EC) Xi;R38,R41.	
PROPAN-2-OL		5-10%
CAS number: 67-63-0	EC number: 200-661-7	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC or 1999/45/EC) F;R11 Xi;R36 R67	
1-METHOXY-2-PROPANOL CAS number: 107-98-2	EC number: 203-539-1	5-10%
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336	Classification (67/548/EEC or 1999/45/EC) R10 R67	

DIETHYLENETRIAMINE	<1%	
CAS number: 111-40-0	EC number: 203-865-4	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 -	Classification (67/548/EEC or 1999/45/EC) C;R34 Xn;R21/22 R43	
TETRAETHYLENEPENTAM	INE <1%	
CAS number: 112-57-2	EC number: 203-986-2	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317	Classification (67/548/EEC or 1999/45/EC) C;R34 Xn;R21/22 R43 N;R51/53	
The Full Text for all R-Phrase	es and Hazard Statements are Displayed in Section 16.	
SECTION 4: First aid measu	ires	
4.1. Description of first aid r	neasures	
Inhalation	Remove casualty from exposure ensuring one's own safety whilst doing so	
Ingestion	Wash out mouth with water. Transfer to hospital as soon as possible	
Skin contact	Drench the affected skin with running water for 10 minutes or longer if substance is still on skin	
Eye contact	Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination	
4.2. Most important sympto	ms and effects, both acute and delayed	
Inhalation	There may be irritation of the throat with a feeling of tightness in the chest	
Ingestion	There may be soreness and redness of the mouth and throat. Corrosive burns may appear around the lips	
Skin contact	An itchy rash may occur at the site of contact	
Eye contact	There may be irritation and pain	

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m3. Oxides of carbon.
5.3. Advice for	
firefighters	NOTE! Use air-supplied respirators to protect against gases¥fumes. Use special protective
Protective actions during firefighting	Keep run-off water out of sewers and water sources. Dike for water control.
Special protective equipment for firefighters	Face mask, protective gloves and safety helmet. Self contained breathing apparatus and full protective clothing must be worn in case of fire.
SECTION 6: Accidental relea	ase measures
6.1. Personal precautions, p	rotective equipment and emergency procedures
Personal precautions	For personal protection, see section 8. Eliminate all sources of ignition.
6.2. Environmental precautio	ons
Environmental precautions	Do not discharge into drains, water courses or onto the ground. Contain the spillage using bunding
6.3. Methods and material fo	or containment and cleaning up
Methods for cleaning up	Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method
6.4. Reference to other secti	ons
Reference to other sections	The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic
	environment. See section 12 as well. For waste disposal, see section 13.
SECTION 7: Handling and st	orage
7.1. Precautions for safe har	Idling

Usage precautions	Avoid spilling, skin and eye contact. Avoid contact with skin and eyes. Contaminated
	is sufficient ventilation of the area
	is sufficient ventilation of the area

7.2. Conditions for safe storage, including any incompatibilities

Store in cool, well ventilated area. Keep container tightly
Chemical storage. Corrosive storage.
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 PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³ Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 375 mg/m3(Sk) Short-term exposure limit (15-minute): WEL 150 ppm(Sk)

DIETHYLENETRIAMINE

5

Long-term exposure limit (8-hour TWA): WEL 1 ppm(Sk) 4.3 mg/m3(Sk) Short-term exposure limit (15-minute): WEL WEL = Workplace Exposure Limit

WEL = Workplace Exposure Limits No exposure limit value known for the mixture

8.2. Exposure controls

Ingredient comments

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	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.
Hand protection	Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical

properties Partition coefficient No data available

9.2. Other information		
SECTION 10: Stability and reactivity		
10.1. Reactivity		
Reactivity	There are no known reactivity hazards associated with this product.	
10.2. Chemical stability		
Stability	Stable at normal ambient temperatures and when used as recommended.	
10.3. Possibility of hazardo	us reactions	
Possibility of hazardous reactions	Not available.	
10.4. Conditions to avoid		
Conditions to avoid	Heat, flames and sparks	

10.5. Incompatible materials

Materials to avoid	Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.
10.6. Hazardous decomposi	ition products
Hazardous decomposition products	Nitric acid (HNO3). Ammonia. Nitrogen oxides (NOx) Nitrogen oxide can react with water vapors to form corrosive nitric acid Carbon monoxide (CO). Carbon dioxide (CO2). Aldehydes. Flammable hydrocarbon fragments
SECTION 11: Toxicological	information
11.1. Information on toxicol	ogical effects
Acute toxicity - oral	
Notes (oral LD ₅₀)	No data is available on the product itself
Serious eye damage/irritati Serious eye damage/irritat	ion Not available.
Skin sensitisation Skin sensitisation	Dermal sensitization to this product or components has been seen in some humans. Components of this product have been found to cause mild skin sensitization in guinea pigs.
Germ cell mutagenicity	The product or a component may be mutagenic, the data is inconclusive
	The product of a component may be mutagenic, the data is inconclusive.
Carcinogenicity Carcinogenicity	Not available
Reproductive toxicity Reproductive toxicity - fert	ility No data is available on the product itself
Specific target organ toxici	ty - single exposure
STOT - single exposure	Eye disease. Skin disorders and allergies. Neurological disorders.
Target organs	Skin Eyes Central nervous system
Specific target organ toxici	ty - repeated exposure
STOT - repeated exposure	Rats exposed orally to 800 mg/kg benzyl alcohol for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No Observed Adversed Effect Level (NOAL) was 400 mg/kg. No evidence of carcinogenicity was seen in a two-year study with rats and mice. This product contains

listed carcinogen(s) according to Directive 67/548/EEC, IARC, ACGIH and/or NTP in

Skin contact	Causes skin burns. If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Harmful in contact with skin.
Eye contact	Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. Exposed individuals may see rings around bright lights. This effect is temporary and has no known residual effect. Product vapor can cause glaucopsia (corneal edema) when absorbed into the tissue of the eye from the atmosphere. Causes eye burns. May cause blindness.

SECTION 12: Ecological Information

12.1. Toxicity			
Toxicity	No data is available on the product itself		
12.2. Persistence and degradability			
Persistence and degradabili	ty No data available.		
12.3. Bioaccumulative potential			
Bioaccumulative potential	No data is available on the product		
itself. Partition coefficient	No data available		
12.4. Mobility in soil			
Mobility	Not available		
12.5. Results of PBT and vPv	vB assessment		
Results of PBT and vPvB assessment	Not available		
12.6. Other adverse effects			
Other adverse effects	Not available.		
SECTION 13: Disposal considerations			
12.1. Waste treatment methods			

13.1. Waste treatment methods		
General information	The product should not be allowed to enter drains, water courses or the soil; dispose of this material and its container in a safe way. Contact supplier if guidance is required.	
Disposal methods	Dispose of container and unused contents in accordance with federal, state, and local requirements.	
SECTION 14: Transport information		

General

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulkNot applicable.according to Annex II ofMARPOL 73/78 and theIBC CodeIBC Code

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).		
Guidance	Workplace Exposure Limits EH40. CHIP for everyone HSG(108). Approved Classification and Labelling Guide (Sixth edition) L131.		

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	15/06/2017
Revision	3
Supersedes date	01/06/2015
Hazard statements in full	 H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.