Report Date : 09/12/2013 Revision Date 02/12/2013

Revision 10

Supersedes date 01/10/2013



SAFETY DATA SHEET METACLOR UNDERWATER PRIMER - GREY

SDS No.

10228

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name METACLOR UNDERWATER PRIMER - GREY

Product No. 520/P149/224

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

Identified uses As an underwater primer on prepared steel, or as a sealer coat over most conventional antifouling

systems.

1.3. Details of the supplier of the safety data sheet

Supplier TEAL & MACKRILL LIMITED

LOCKWOOD STREET

HULL HU2 0HN

+44(0)1482 320194(T) +44(0)1482 219266(F) info@teamac.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

+44 (0) 1482 320194 (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 (1999/45/EEC) Xn;R20/21. Xi;R37. N;R50/53. R10.

2.2. Label elements

Contains XYLENE, MIXED ISOMERS

Labelling



Harmful Dangerous for the environment

Risk Phrases

R10 Flammable.

R20/21 Harmful by inhalation and in contact with skin.

R37 Irritating to respiratory system.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Safety Phrases

S2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S29/56 Do not empty into drains, dispose of this material and its container at

hazardous or special waste collection point.

S36/37 Wear suitable protective clothing and gloves.

SDS No. 10228

5-10%

METACLOR UNDERWATER PRIMER - GREY

S46 If swallowed, seek medical advice immediately and show this container or

label.

S51 Use only in well-ventilated areas.

S61 Avoid release to the environment. Refer to special instructions/safety data

sheets

S64 If swallowed, rinse mouth with water (only if the person is conscious).

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hydrocarbons, C9, aromatics

Ī	Calcium Carbonate			10-30%
	CAS-No.: 1317-65-3	EC No.: 215-279-6		
ŀ	Classification (EC 1272/2008) Not classified		Classification (67/548/EEC) Not classified	

Not classified.		Not classified.
XYLENE, MIXED ISOMERS		10-30%
CAS-No.: 1330-20-7	EC No.: 215-535-7	Registration Number: 01-2119488216-32-xxxx
Classification (EC 1272/2008)		Classification (67/548/EEC)
Flam. Liq. 3 - H226 Acute Tox. 4 - H312		Xn;R20/21,R65. Xi:R36/37/38.
Acute Tox. 4 - H332		R10.
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		
STOT SE 3 - H335		
STOT RE 2 - H373		
Asp. Tox. 1 - H304		

TRIZINC BIS(ORTHOPHOSPHATE)		10-30%		
CAS-No.: 7779-90-0	EC No.: 231-944-3	Registration Number: 01-2119485044-40-0000		
Classification (EC 1272/2008) Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		Classification (67/548/EEC) N;R50/53		

CAS-No.:	EC No.: 918-668-5	Registration Number: 01-2119455851-35-xxxx
Classification (EC 1272/2008)		Classification (67/548/EEC)
Flam. Liq. 3 - H226		Xn;R65.
EUH066		Xi;R37.
STOT SE 3 - H335, H336		N;R51/53.
Asp. Tox. 1 - H304		R10,R66,R67.
Aquatic Chronic 2 - H411		

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

ETHYLBENZENE			5-10%
CAS-No.: 100-41-4	EC No.: 202-849-4		
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 4 - H332		Classification (67/548/EEC) F;R11 Xn;R20	
WHITE SPIRIT			1-5%
CAS-No.:	EC No.: 919-446-0	Regi	istration Number: 01-2119458049-33-XXXX
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411		Classification (67/548/EEC) Xn;R65. N;R51/53. R10,R66,R67.	
Chlorinated polymer 20			1-5%
CAS-No.: 9006-03-5	EC No.:		
Classification (EC 1272/2008) Not classified.		Classification (67/548/EEC) Not classified.	
Diatomaceous Earth			1-5%
CAS-No.: 61790-53-2	EC No.: 310-127-6		
Classification (EC 1272/2008) Not classified.		Classification (67/548/EEC) Not classified.	
Stoddard solvent			1-5%
CAS-No.: 8052-41-3	EC No.: 232-489-3		
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 Repr. 2 - H361d STOT SE 3 - H336 Aquatic Chronic 2 - H411		Classification (67/548/EEC) Repr. Cat. 3;R63. N;R51/53. R10,R66,R67.	
Zinc Oxide			<1%
CAS-No.: 1314-13-2	EC No.: 215-222-5		Registration Number: 01-2119463881-32
Classification (EC 1272/2008) Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		Classification (67/548/EEC) N;R50/53.	

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

ETHANOL <1% EC No.: 200-578-6 CAS-No.: 64-17-5 Registration Number: 01-2119457610-43-xxxx Classification (EC 1272/2008) Classification (67/548/EEC) Flam. Liq. 2 - H225 F;R11 2-BUTANONE OXIME <0.1% CAS-No.: 96-29-7 EC No.: 202-496-6 Registration Number: 01-2119539477-28 Classification (EC 1272/2008) Classification (67/548/EEC) Carc. Cat. 3;R40 Acute Tox. 4 - H312 Eye Dam. 1 - H318 Xn;R21 Skin Sens. 1 - H317 R43 Carc. 2 - H351 Xi;R41 **TOLUENE** <0.1% EC No.: 203-625-9 CAS-No.: 108-88-3 Registration Number: 01-2119471310-51-0026 Classification (EC 1272/2008) Classification (67/548/EEC) Flam. Liq. 2 - H225 F;R11 Repr. Cat. 3;R63 Skin Irrit. 2 - H315 Repr. 2 - H361d Xn;R48/20,R65 STOT SE 3 - H336 Xi;R38 STOT RE 2 - H373 R67 Asp. Tox. 1 - H304 PHTHALIC ANHYDRIDE <0.1% CAS-No.: 85-44-9 EC No.: 201-607-5 Classification (EC 1272/2008) Classification (67/548/EEC) Acute Tox. 4 - H302 Xn;R22 Skin Irrit. 2 - H315 R42/43 Eye Dam. 1 - H318 Xi;R37/38,R41 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT SE 3 - H335 2-METHYLPENTANE-2,4-DIOL <0.1% CAS-No.: 107-41-5 EC No.: 203-489-0 Classification (EC 1272/2008) Classification (67/548/EEC) Skin Irrit. 2 - H315 Xi;R36/38 Eye Irrit. 2 - H319 ZIRCONIUM SALT, 2-ETHYLHEXANOIC ACID <0.1% CAS-No.: 22464-99-9 EC No.: 245-018-1 Registration Number: 01-2119979088-21-0002 Classification (EC 1272/2008) Classification (67/548/EEC) Repr. 2 - H361d Repr. Cat. 3;R63.

Flam. Liq. 2 - H225

Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

Low Aromatic White Spirit <0.1% CAS-No.: EC No.: 919-857-5 Registration Number: 01-2119463258-33-XXXX Classification (EC 1272/2008) Classification (67/548/EEC) Flam. Liq. 3 - H226 Xn:R65. FUH066 R10,R66,R67. STOT SE 3 - H336 Asp. Tox. 1 - H304 **METHANOL** <0.1% CAS-No.: 67-56-1 EC No.: 200-659-6 Classification (EC 1272/2008) Classification (67/548/EEC) F;R11

ZIRCONIUM PROPIONATE < 0.1% CAS-No.: 84057-80-7 EC No.: 281-897-8 Registration Number: 01-2119978305-30-0000 Classification (EC 1272/2008) Classification (67/548/EEC) Not classified. Not classified.

T;R23/24/25,R39/23/24/25

2,6-Di-tert-butyl-p-cresol <0.1% EC No.: 204-881-4 CAS-No.: 128-37-0 Registration Number: 01-2119565113-46-xxxx Classification (EC 1272/2008) Classification (67/548/EEC) Aquatic Acute 1 - H400 N;R50/53.

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

SECTION 4: FIRST AID MEASURES

Aquatic Chronic 1 - H410

4.1. Description of first aid measures

General information

General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious.

Inhalation

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues. Place unconscious person on the side in the recovery position and ensure breathing can take place.

DO NOT induce vomiting. Get medical attention immediately. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes and get medical attention.

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

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

General information

If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

FLAMMABLE. Solvent vapours may form explosive mixtures with air.

Specific hazards

When heated and in case of fire, harmful vapours/gases may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Be aware of danger for fire to re-start. Cool containers exposed to flames with water until well after the fire is out. Do not allow runoff to sewer, waterway or ground.

Protective equipment for fire-fighters

Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Do not smoke, use open fire or other sources of ignition. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Should be prevented from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

6.4. Reference to other sections

For personal protection, see section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Do not eat, drink or smoke when using the product. 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

Store in closed original container at temperatures between 5°C and 25°C. Keep away from heat, sparks and open flame. Keep containers tightly closed. Keep upright. Store separated from: Oxidising material. Alkalis. Acids.

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

Storage Class

Flammable liquid storage. The storage and use of this product is subject to the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage od Danderous Substances: DSEAR. Up to 50 litres of liquids with a flashpoint below 32C may be kept in a workroom provided they are kept in closed containers in a marked, fire-resisting cupboard or bin. Larger quantities must be kept in a separate, marked storeroom conforming to the structural requirements contained in the HSE guidance note Storage of Flammable Liquids in Containers.

7.3. Specific end use(s)

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

Usage Description

Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA	- 8 Hrs	STEL -	- 15 Min	Notes
2,6-Di-tert-butyl-p-cresol	WEL		10 mg/m3			
2-METHYLPENTANE-2,4-DIOL	WEL	25 ppm	123 mg/m3	25 ppm	123 mg/m3	
Calcium Carbonate	WEL		10 mg/m3			
Chlorinated polymer 20	WEL		10 mg/m3 total dust			
Diatomaceous Earth	WEL		1.2 mg/m3			
ETHANOL	WEL	1000 ppm	1920 mg/m3			
ETHYLBENZENE	WEL	100 ppm	441 mg/m3	125 ppm	552 mg/m3	Sk
Hydrocarbons, C9, aromatics	WEL	19 ppm	100 mg/m3			
Low Aromatic White Spirit	WEL		1000 mg/m3			
METHANOL	WEL	200 ppm(Sk)	266 mg/m3(Sk)	250 ppm(Sk)	333 mg/m3(Sk)	
PHTHALIC ANHYDRIDE	WEL		4 mg/m3(Sen)		12 mg/m3(Sen)	
TOLUENE	WEL	50 ppm	191 mg/m3	100 ppm	384 mg/m3	Sk
TRIZINC BIS(ORTHOPHOSPHATE)			10 mg/m3			
WHITE SPIRIT	WEL		350 mg/m3			
XYLENE, MIXED ISOMERS	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk
Zinc Oxide	WEL		5 mg/m3		10 mg/m3	
ZIRCONIUM PROPIONATE	WEL		5 mg/m3		10 mg/m3	
ZIRCONIUM SALT, 2-ETHYLHEXANOIC ACID	WEL		5 mg/m3		10 mg/m3	

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY						
	TRIZINO	C BIS(ORTHOPHOSPHA	TE) (CAS: 7779-90-0)			
DNEL		•	· · · · · · · · · · · · · · · · · · ·			
Inhalation.	1.0 soluble Zn	mg/m3				
Inhalation.	5.0 insoluble Zn	mg/m3				
Professional	Dermal	Long Term	Systemic Effects	83 mg/kg/day		
Professional	Inhalation.	Long Term	Systemic Effects	5 mg/m3		
Consumer	Dermal	Long Term	Systemic Effects	83 mg/kg/day		
Consumer	Inhalation.	Long Term	Systemic Effects	2.5 mg/m3		
Consumer	Oral	Long Term	Systemic Effects	0.83 mg/kg/day		
PNEC						
Freshwater	0.02 Zn	mg/l				
Marinewater	0.006 Zn	mg/l				
Sediment (Freshwater)	117.8	mg/kg				
Sediment (Marinewater)	56.5 Zn	mg/kg				
Soil	35.6 Zn	mg/kg				
STP	0.05 Zn	mg/l				
		Zinc Oxide (CAS: 13	<u>14-13-2)</u>			
DNEL						
Professional	Oral	Local Effects	62.2	mg/kg/day		
Professional	Dermal	Local Effects	6223	mg/kg/day		
Professional	Inhalation.	Local Effects	6.2	mg/m3		
Consumer	Inhalation.	Local Effects	3.1	mg/m3		
Consumer	Dermal	Local Effects	622	mg/kg/day		
PNEC						
Freshwater	25600	mg/l				
Marinewater	7600	mg/l				
Sediment (Freshwater)	146	mg/kg				
STP	64700	mg/l				
Sediment (Marinewater)		mg/kg				
Soil	44.3	mg/kg	-			
DNE		Low Aromatic Whit	<u>e Spirit</u>			
DNEL	Ovel	Laur Taur	Contant Effects	200		
Consumer	Oral Dermal	Long Term	Systemic Effects	300 mg/kg/day		
Consumer	Dermal	Long Term Long Term	Systemic Effects	300 mg/kg/day		
Industry Industry	Inhalation.	Long Term	Systemic Effects Systemic Effects	300 mg/kg/day 1500 mg/m3		
Consumer	Inhalation.	Long Term	Systemic Effects	900 mg/m3		
		-	,	ed for single substances and are not		
	ssessment of this comple		tilis enupoliti are interior	ed for single substances and are not		
appropriate for the flort a	occoment of the comple	WHITE SPIR	IT			
DNEL		<u></u>	<u></u>			
Consumer	Oral	Long Term	Systemic Effects	1040 mg/kg/day		
Consumer	Dermal	Long Term	Systemic Effects	1040 mg/kg/day		
Consumer	Inhalation.	Long Term	Systemic Effects	710 mg/m3		
Consumer	Inhalation.	Short Term	Systemic Effects	570 mg/m3		
Industry	Inhalation.	Short Term	Systemic Effects	570 mg/m3		
Industry	Inhalation.	Long Term	Systemic Effects	1980 mg/m3		
Industry	Dermal	Long Term	Systemic Effects	1056 mg/kg/day		
		Hydrocarbons, C9, a	romatics			
DNEL						
Consumer	Oral	Long Term	Systemic Effects	11 mg/kg/day		
Consumer	Dermal	Long Term	Systemic Effects	11 mg/kg/day		
Consumer	Inhalation.	Long Term	Systemic Effects	32 mg/m3		
Industry	Dermal	Long Term	Systemic Effects	25 mg/kg/day		
Industry	Inhalation.	Long Term	Systemic Effects	100 mg/m3		
	<u>XYI</u>	ENE, MIXED ISOMERS	(CAS: 1330-20-7)			
DNEL						
Consumer	Oral	Long Term	Systemic Effects	12.5 mg/kg/day		
Consumer	Dermal	Long Term	Systemic Effects	1872 mg/kg/day		
Consumer	Inhalation.	Long Term	Systemic Effects	65.3 mg/m3		
Congumer	Inhalation	Chart Tarm	260	ma/m2		

No PNEC available. Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for the risk assessment of this complex substance.

ETHYLBENZENE (CAS: 100-41-4)

260

442

Systemic Effects

Systemic Effects

mg/m3

mg/m3

3182 mg/kg/day

221 mg/m3

DNEL

Consumer

Industry

Industry

Industry

Inhalation.

Inhalation.

Inhalation.

Dermal

Consumer Oral Long Term Systemic Effects 1.6 mg/kg/day

Short Term

Long Term

Long Term

Short Term

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

mg/kg/day

				- -			
Consumer	Dermal	Long Term	Systemic Effects	108 mg/kg/day			
Consumer	Inhalation.	Long Term	Systemic Effects	14.8 mg/m3			
Industry	Dermal	Long Term	Systemic Effects	180 mg/kg/day			
Industry	Inhalation.	Long Term	Systemic Effects	77 mg/m3			
Industry Inhalation.		Short Term	289	mg/m3			
	2,6-Di-tert-butyl-p-cresol (CAS: 128-37-0)						
DNEL							
Industry	Dermal	0.5	mg/kg/day				

Industry Inhalation 3.5 **PNEC** 0.000199 Freshwater ma/l Marinewater 0.0000199 ma/l Sediment 0.0996 mg/l 0.04769 Soil mg/l

8.2. Exposure controls

Protective equipment





Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

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. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent reasonably probable skin contact.

Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with acids and oxidising substances.

10.5. Incompatible materials

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

Materials To Avoid

Strong alkalis. Strong acids. Strong oxidising substances.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Vapour from this chemical can be hazardous when inhaled. Vapour may irritate respiratory system or lungs.

Ingestion

Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

Skin contact

Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Prolonged or repeated exposure may cause severe irritation.

Eye contact

May cause temporary eye irritation.

Health Warnings

This product has low toxicity. Only large volumes may have adverse impact on human health.

Route of entry

Inhalation. Skin absorption. Ingestion. Skin and/or eye contact.

Medical Considerations

Skin disorders and allergies. Avoid vomiting and normal rinse of stomach because of risk of aspiration.

Toxicological information on ingredients.

2-BUTANONE OXIME (CAS: 96-29-7)

Toxic Dose 1 - LD 50

2528 mg/kg (oral rat)

Toxic Conc. - LC 50

>10.5 mg/l/4h (inh-rat)

Other Health Effects

Carcinogen Category 2.

Aspiration hazard:

General information

Known or suspected carcinogen for humans.

Skin contact

May cause sensitisation by skin contact. Harmful in contact with skin.

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY TRIZING BIS(ORTHOPHOSPHATE) (CAS: 7779-90-0)

Toxic Dose 1 - LD 50 >5000 mg/kg (oral rat)
Toxic Dose 2 - LD 50
522 mg/kg (ipr-mouse)

Toxic Conc. - LC 50

>5.7 mg/l/4h (inh-rat)

Acute toxicity:

Not irritating

Skin Corrosion/Irritation:

Not irritating.

Serious eye damage/irritation:

Not Irritating.

Respiratory or skin sensitisation:

Not sensitising.

Not Sensitising.

Germ cell mutagenicity:

Does not contain any substances known to be mutagenic.

Carcinogenicity:

This substance has no evidence of carcinogenic properties.

Reproductive Toxicity:

This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure:

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure:

Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard:

General information

No specific health warnings noted.

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY WHITE SPIRIT

Other Health Effects

This substance has no evidence of carcinogenic properties.

Acute toxicity:

Acute Toxicity (Oral LD50)

> 15000 mg/kg Rat

Minimally toxic via ingestion

Acute Toxicity (Dermal LD50)

~ 3400 mg/kg Rabbit

Not corrosive to skin Not irritating

Acute Toxicity (Inhalation LC50)

> 13.1 mg/l (vapours) Rat 4 hours

Serious eye damage/irritation:

Not Irritating.

Respiratory or skin sensitisation:

Respiratory sensitisation

Not determined.

There is evidence that the material can lead to respiratory hypersensitivity.

Not Sensitising.

Carcinogenicity:

Carcinogenicity

NOAEL 300 mg/kg Oral Rat

Reproductive Toxicity:

Reproductive Toxicity - Fertility

One-generation study: NOAEL >3000 mg/kg/day Oral Rat P

Reproductive Toxicity - Development

Developmental toxicity: NOAEC >300 ppm Inhalation. Rat

Specific target organ toxicity - single exposure:

Target Organs

Central nervous system

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEL 1056 mg/kg Oral Rat

Aspiration hazard:

Viscosity

Kinematic viscosity <= 20.5 mm2/s.

Inhalation

No specific health warnings noted.

Ingestion

Harmful: may cause lung damage if swallowed. May cause stomach pain or vomiting.

Skin contact

May cause defatting of the skin, but is not an irritant. Not a skin sensitiser.

Eye contact

No specific health warnings noted.

Route of entry

Skin and/or eye contact. Inhalation.

Target Organs

Central nervous system

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

Hydrocarbons, C9, aromatics

Acute toxicity:

Acute Toxicity (Oral LD50)

~ 3592 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 3160 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

> 6193 mg/l (vapours) Rat 4 hours

Serious eye damage/irritation:

Slightly Irritating.

Respiratory or skin sensitisation:

Not sensitising.

Not Sensitising.

Carcinogenicity:

This substance has no evidence of carcinogenic properties.

Specific target organ toxicity - single exposure:

Target Organs

Central nervous system Respiratory system, lungs

Aspiration hazard:

Viscosity

Kinematic viscosity <= 20.5 mm2/s.

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY XYLENE, MIXED ISOMERS (CAS: 1330-20-7)

Acute toxicity:

Acute Toxicity (Oral LD50)

4300 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 1700 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

5000 ppmV (gas) Rat 4 hours

Serious eye damage/irritation:

Severe skin irritant; irritation of eyes is assumed. No testing is needed.

Respiratory or skin sensitisation:

Not sensitising.

Not Sensitising.

Carcinogenicity:

This substance has no evidence of carcinogenic properties.

Reproductive Toxicity:

This substance has no evidence of toxicity to reproduction.

Aspiration hazard:

Viscosity

Kinematic viscosity <= 20.5 mm2/s.

Inhalation

Harmful by inhalation.

Ingestion

Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Skin contact

Harmful in contact with skin.

Eye contact

May cause severe irritation to eyes.

Target Organs

Central nervous system Liver

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY ETHYLBENZENE (CAS: 100-41-4)

Acute toxicity:

Acute Toxicity (Oral LD50)

3523 mg/kg Rat

Acute Toxicity (Dermal LD50)

12126 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

27000 mg/l (vapours) Rat 4 hours

Serious eye damage/irritation:

Severe skin irritant; irritation of eyes is assumed. No testing is needed.

Respiratory or skin sensitisation:

Not sensitising.

Not Sensitising.

Carcinogenicity:

This substance has no evidence of carcinogenic properties.

Aspiration hazard:

Kinematic viscosity <= 20.5 mm2/s.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Ecological information on ingredients.

XYLENE, MIXED ISOMERS (CAS: 1330-20-7)

Ecotoxicity

The product is not expected to be hazardous to the environment.

ETHYLBENZENE (CAS: 100-41-4)

Ecotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity

METACLOR UNDERWATER PRIMER - GREY

Ecological information on ingredients.

2-BUTANONE OXIME (CAS: 96-29-7)

Acute Fish Toxicity

Not considered toxic to fish.

LC 50, 96 Hrs, Fish mg/l

>100

EC 50, 48 Hrs, Daphnia, mg/l

201

IC 50, 72 Hrs, Algae, mg/l

11.8

TRIZINC BIS(ORTHOPHOSPHATE) (CAS: 7779-90-0)

LC 50, 96 Hrs, Fish mg/l

Oncorhynchus mykiss 0.14 - 0.26 Zn2+

EC 50, 48 Hrs, Daphnia, mg/l

Daphnia magna 0.04 - 0.86 Zn2+

IC 50, 72 Hrs, Algae, mg/l

Desmodesmus subspicatus < 0.3

EC50 72 hours 0.136 - 0.15 Zn2+ mg/l Selenastrum capricornutum

WHITE SPIRIT

Dangerous for the environment if discharged into watercourses Toxic to aquatic organisms

LC 50, 96 Hrs, Fish mg/l

10 - 30

EC 50, 48 Hrs, Daphnia, mg/l

10 - 22

IC 50, 72 Hrs, Algae, mg/l

4.6 - 10

Chronic Toxicity - Aquatic Invertebrates

NOEC 21 days < 0.28 mg/l Daphnia magna

Hydrocarbons, C9, aromatics

Toxic to aquatic organisms

LC 50, 96 Hrs, Fish mg/l

9.2

EC 50, 48 Hrs, Daphnia, mg/l

3.2

XYLENE, MIXED ISOMERS (CAS: 1330-20-7)

LC 50, 96 Hrs, Fish mg/l

2.6

EC 50, 48 Hrs, Daphnia, mg/l

3.62

IC 50, 72 Hrs, Algae, mg/l

3.2

ETHYLBENZENE (CAS: 100-41-4)

LC 50, 96 Hrs, Fish mg/l

4.2

EC 50, 48 Hrs, Daphnia, mg/l

>2.93

IC 50, 72 Hrs, Algae, mg/l

2.2

Chronic Toxicity - Aquatic Invertebrates

NOEC 21 days 6.8 mg/l Daphnia magna

12.2. Persistence and degradability

Degradability

The product is not expected to be biodegradable.

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

Ecological information on ingredients.

WHITE SPIRIT

Degradability

The product is easily biodegradable.

Biodegradation

Degradation (75%) 28 days

Hydrocarbons, C9, aromatics

Degradability

The product is easily biodegradable.

Biodegradation

Degradation (78%) 28 days

XYLENE, MIXED ISOMERS (CAS: 1330-20-7)

Degradability

The product is easily biodegradable.

ETHYLBENZENE (CAS: 100-41-4)

Degradability

The product is easily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product contains potentially bioaccumulating substances.

Ecological information on ingredients.

2-BUTANONE OXIME (CAS: 96-29-7)

Bioaccumulative potential

Will not bio-accumulate.

Partition coefficient

log Pow 0.63

TRIZINC BIS(ORTHOPHOSPHATE) (CAS: 7779-90-0)

Bioaccumulative potential

The product is not bioaccumulating.

WHITE SPIRIT

Bioaccumulation factor

Scientifically unjustified.

Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

Hydrocarbons, C9, aromatics

Bioaccumulative potential

No data available on bioaccumulation.

XYLENE, MIXED ISOMERS (CAS: 1330-20-7)

Partition coefficient

log Kow 3.12 - 3.2

12.4. Mobility in soil

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

Ecological information on ingredients.

2-BUTANONE OXIME (CAS: 96-29-7)

Mobility:

The product is soluble in water.

WHITE SPIRIT

Adsorption/Desorption Coefficient

Scientifically unjustified.

Volatilisation is dependent on Henry's Law constant (HLC) which is not applicable to complex substances.

Hydrocarbons, C9, aromatics

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

TRIZINC BIS(ORTHOPHOSPHATE) (CAS: 7779-90-0)

Not Classified as PBT/vPvB by current EU criteria.

WHITE SPIRIT

Not Classified as PBT/vPvB by current EU criteria.

Hydrocarbons, C9, aromatics

Not Classified as PBT/vPvB by current EU criteria.

XYLENE, MIXED ISOMERS (CAS: 1330-20-7)

Not Classified as PBT/vPvB by current EU criteria.

ETHYLBENZENE (CAS: 100-41-4)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

The product contains volatile, organic compounds which have a photochemical ozone creation potential.

Ecological information on ingredients.

2-BUTANONE OXIME (CAS: 96-29-7)

Not determined.

TRIZINC BIS(ORTHOPHOSPHATE) (CAS: 7779-90-0)

Not available.

WHITE SPIRIT

This substance may contribute to ozone formation in the near surface atmosphere. However, the photochemical formation of ozone depends or a complex interaction of other atmospheric pollutant sources and environmental conditions. Therefore, the contribution of this substance to ozone formation is outside the scope of this substance assessment and is more appropriately addressed via EU air quality directives.

Hydrocarbons, C9, aromatics

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Do not allow to enter drains, sewers or watercourses.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

Waste Class

When this coating, in its liquid state, as supplied, becomes a waste, it is categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). Part-used containers, not drained and/or rigorously scraped out and containing dried residues of the supplied coating, are categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). If mixed with other wastes, the above waste code may not be applicable. Used containers, drained and/or rigorously scraped out and containing dry residues of the supplied coating, are categorised as non-hazardous waste, with code 15 01 02 (plastic packaging) or 15 01 04 (metal packaging).

SECTION 14: TRANSPORT INFORMATION

General This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG.

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 Contains Solvent Naphtha (Petroleum), Class 3, PGIII, (38 °C), Trizinc bis(orthophosphate), MARINE

POLLUTANTS

Proper Shipping Name PAINT

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

14.3. Transport hazard class(es)

ADR/RID/ADN Class 1263

ADR/RID/ADN Class Class 3: Flammable liquids.

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



14.6. Special precautions for user

EMS F-E, S-E
Tunnel Restriction Code (D/E)

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

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

Statutory Instruments

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

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. Dangerous Substances and Explosive Atmospheres Regulations 2002 [L138]

Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

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. National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

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 Substitution of neodecanoate acid, cobalt salt with cobalt polymer complex. Revised classification of zinc phosphate.

Issued By Technical Dept. (P.E.)

Revision Date 02/12/2013

Revision 10

Supersedes date 01/10/2013 SDS No. 10228 Safety Data Sheet Status Approved.

Date Printed_____

Signature Initials_____

Risk Phrases In Full

R10 Flammable.

R20/21 Harmful by inhalation and in contact with skin.

R22 Harmful if swallowed.
R21 Harmful in contact with skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R65 Harmful: may cause lung damage if swallowed.

R11 Highly flammable

R36/38 Irritating to eyes and skin.

R37/38 Irritating to respiratory system and skin.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R40 Limited evidence of a carcinogenic effect.

R42/43 May cause sensitisation by inhalation and skin contact.

R43 May cause sensitisation by skin contact.

NC Not classified.

R63 Possible risk of harm to the unborn child.

R66 Repeated exposure may cause skin dryness or cracking.

R41 Risk of serious damage to eyes.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R67 Vapours may cause drowsiness and dizziness.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SDS No. 10228

METACLOR UNDERWATER PRIMER - GREY

Hazard Statements In Full

H370 Causes damage to organs << Organs>>.

H318 Causes serious eye damage.
H319 Causes serious eye irritation.

H315 Causes skin irritation.

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs << Organs>> through prolonged or repeated exposure.

H336 May cause drowsiness or dizziness.H335 May cause respiratory irritation.

EUH066 Repeated exposure may cause skin dryness or cracking.

H351 Suspected of causing cancer.

H361d Suspected of damaging the unborn child.

H331 Toxic if inhaled.H301 Toxic if swallowed.H311 Toxic in contact with skin.

H411 Toxic to aquatic life with long lasting effects.
 H410 Very toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

Disclaimer

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.