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

1.1. Product identifier

SEAVOYAGE 1220

Product code: 656VR - Version 3 - Revision Date: 23-08-2017

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

Antifouling paint.

1.3. Details of the supplier of the safety data sheet

Sherwin-Williams Protective & Marine, Tower Works, Kestor Street, Bolton BL2 2AL United Kingdom, +44 (0) 1204 521771 - The Sherwin-Williams Company, Inver France SAS, 2 Rue Jean Revaus – BP 80088 – 79102, Thouars CEDEX France, +33 (0)5 49 96 05 00 (For enquires, please use the UK number)

1.4. Emergency telephone number

Supplier Telephone number; +(44)-870-8200 418, Hours of operation: Emergency contact available 24 hours a day.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according Regulation (EC) No 1272/2008.

Flam. Liq. 3 H226	Flammable liquid and vapour.
Skin Irrit. 2 H315	Causes skin irritation.
Eye Dam. 1 H318	Causes serious eye damage.
Skin Sens. 1 H317	May cause an allergic skin reaction.
Lact. H362	May cause harm to breast-fed children.
STOT RE 2 H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Acute 1 H400	Very toxic to aquatic life.
Aquatic Chronic 1 H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No 1272/2008.


GHS02


GHS05


GHS07

Signalword:
Danger


GHS08


GHS09

Hazard Statements:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours/spray.
P263	Avoid contact during pregnancy and while nursing.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection, face protection.

Response:	
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 or doctor.
P370+P378	In case of fire: Use alcohol resistant foam to extinguish.
P391	Collect spillage.

Storage & Disposal: -

Contains (EC 1272/2008 18.3(b)):
Cuprous(I)Oxide.

Xylene.
Rosin.
Chlorinated paraffins, C14-17 (52%).

Extended details regarding health and environment, see section 11 & 12.

Supplemental hazard information: None

2.3. Other hazards
Restricted to professional users.
Children shall be kept away until treated surfaces are dry.
Application, maintenance and repair activities shall be conducted within a contained area, on impermeable hard standing with bunding or on soil covered with an impermeable material to prevent losses and minimise emissions to the environment, and that any losses or waste shall be collected for reuse or disposal.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substances presenting a health or environmental hazard within the meaning of Regulation (EC) No. 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.
(*) See Section 16 for full text.

Substance Name	Reg.nr's	Conc.range	Symbol		
Cuprous(I)Oxide.	EG-nr: 215-270-7	25-30		Hazard statement (*)	
	CAS-nr: 1317-39-1			H302 - Acute Tox. 4	H410 - Aquatic Chronic 1
	Index: 029-002-00-X			H332 - Acute Tox. 4	-
				H318 - Eye Dam. 1	-
				H400 - Aquatic Acute 1	-
Reach #: 01-2119513794-36				M(ac)=100	M(chr)=100
Xylene.	EG-nr: 215-535-7	15-20		Hazard statement (*)	
	CAS-nr: 1330-20-7			H226 - Flam. Liq. 3	H319 - Eye Irrit. 2
	Index: 601-022-00-9			H304 - Asp. Tox. 1	H332 - Acute Tox. 4
				H312 - Acute Tox. 4	H335 - STOT SE 3
				H315 - Skin Irrit. 2	H373 - STOT RE 2
Reach #: 01-2119488216-32				-	-
Rosin.	EG-nr: 232-475-7	5-10		Hazard statement (*)	
	CAS-nr: 8050-09-7			H317 - Skin Sens. 1	-
	Index: 650-015-00-7			-	-
				-	-
				-	-
Reach #: 01-2119480418-32				-	-
Ethylbenzene.	EG-nr: 202-849-4	5-10		Hazard statement (*)	
	CAS-nr: 100-41-4			H225 - Flam. Liq. 2	-
	Index: 601-023-00-4			H304 - Asp. Tox. 1	-
				H332 - Acute Tox. 4	-
				H373-(**) - STOT RE 2	-
Reach #: 01-2119489370-35				-	-
Zinc Oxide.	EG-nr: 215-222-5	1-5		Hazard statement (*)	
	CAS-nr: 1314-13-2			H400 - Aquatic Acute 1	-
	Index: 030-013-00-7			H410 - Aquatic Chronic 1	-
				-	-
				-	-
Reach #: 01-2119463881-32				M(ac)=1	M(chr)=1
Butyl Cellosolve.	EG-nr: 203-905-0	1-5		Hazard statement (*)	
	CAS-nr: 111-76-2			H332 - Acute Tox. 4	H315 - Skin Irrit. 2
	Index: 603-014-00-0			H312 - Acute Tox. 4	-
				H302 - Acute Tox. 4	-
				H319 - Eye Irrit. 2	-
Reach #: 01-2119475108-36				-	-
Chlorinated Paraffins, C14-17 (52%).	EG-nr: 287-477-0	0,1-1		Hazard statement (*)	
	CAS-nr: 85535-85-9			H362 - Lact.	-
	Index: 602-095-00-X			H400 - Aquatic Acute 1	-
				H410 - Aquatic Chronic 1	-
				EUH066	-
Reach #: 01-2119519269-33				M(ac)=100	M(chr)=100
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate.	EG-nr: 809-930-9	0,1-1		Hazard statement (*)	
	CAS-nr: 1330-78-5			H361fd(*)	-
	Index: -			H400 - Aquatic Acute 1	-
				H410 - Aquatic Chronic 1	-
				-	-
Reach #: 01-2119531335-46				M(ac)=1	M(chr)=1

Substance Name	Reg.nr's	Conc.range	Symbol	
Toluene. Reach #: 01-2119471310-51	EG-nr: 203-625-9 CAS-nr: 108-88-3 Index: 601-021-00-3	0,1-0,5		H-statement codes (*) H225 - Flam. Liq. 2 H361d(*) - Repr. 2 H304 - Asp. Tox. 1 H373(*) - STOT RE 2 M(ac)=1 M(chr)=1 H315 - Skin Irrit. 2 H336 - STOT SE 3 H412 - Aquatic Chronic 3 -
Epoxy Resin (Number Average Molecular Weight ≤ 700). Reach #: 01-2119456619-26	EG-nr: 500-033-5 CAS-nr: 25068-38-6 Index: 603-074-00-8	0,1-0,5		H-statement codes (*) H319 - Eye Irrit. 2 H315 - Skin Irrit. 2 H317-(1B) - Skin Sens. 1B H411 - Aquatic Chronic 2 M(ac)=1 M(chr)=1 - - - -

SECTION 4: First aid measures

4.1. Description of first aid measures



In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

Inhalation



Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

Skin contact



Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

Eye contact



Remove contact lenses, if present and easy to do. Irrigate copiously with clean, fresh water, holding the eyelids apart for at least 15 minutes and seek immediate medical advice.

Ingestion



If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Potential acute symptoms and effects

Inhalation

No known significant effects or critical hazards.

Skin contact
Causes skin irritation.

Eye contact
Causes serious eye damage.

Ingestion
No known significant effects or critical hazards.

Potential delayed symptoms and effects
Inhalation
No specific data.
Skin contact
Adverse symptoms may include the following: irritation, redness
Eye contact
Adverse symptoms may include the following: irritation, watering, redness
Ingestion
No specific data.

4.3. Indication of any immediate medical attention and special treatment needed
Notes to physician
In case of inhalation of decomposition products in a fire, symptoms may be delayed.
The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments
No specific treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media



Recommended: alcohol resistant foam, CO2, powders, water spray/mist
Extinguishing media which must not be used for safety reasons:
Water jet. Zincdust containing products should not be extinguished with water.

5.2. Special hazards arising from the substance or mixture
Fire will produce dense black smoke.
Exposure to decomposition products may cause a health hazard. See Section 10.
Appropriate breathing apparatus may be required.

5.3. Advice for firefighters
Cool closed containers exposed to fire with water.
Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Exclude sources of ignition and ventilate the area. Avoid breathing vapours.
Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions
Do not allow to enter drains or watercourses.
If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).
Clean preferably with a detergent - avoid use of solvents.

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.
In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
Electrical equipment should be protected to the appropriate standard. No sparking tools should be used.
Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.
Operators should wear anti-static footwear and clothing and floors should be of the conducting type.
Isolate from sources of heat, sparks and open flame.
Avoid skin and eye contact.
Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture.
Avoid inhalation of dust from sanding.
Smoking, eating and drinking should be prohibited in application area.
For personal protection see Section 8.
Never use pressure to empty: container is not a pressure vessel.
Always keep in containers of same material as the original one.
Comply with the health and safety at work laws.
Do not allow to enter drains or water courses.
When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

Information on fire and explosion protection
Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations.

Notes on joint storage
Store away from oxidising agents, from strongly alkaline and strongly acid materials.

Additional information on storage conditions
Observe label precautions.
Store between 0ºC and 40ºC in a dry, well ventilated place away from sources of heat and direct sunlight.
Keep container tightly closed.
Keep away from sources of ignition.
No smoking.
Prevent unauthorised access.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)
Application: Airless spray, brush, roller (See also the Technical Datasheet)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Limits for occupational exposure and / or biological limit values	GB	EU
	LIMIT VALUES TWA8h - STEL15 ppm-mg/m³	LIMIT VALUES TWA8h - STEL15 ppm-mg/m³
Cuprous(I)Oxide.	TWA8h - ppm / 1(dust/mist) mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / 2(dust/mist) mg/m³	STEL15 - ppm / - mg/m³
	Annotations -	Notation -
Xylene.	TWA8h 50 ppm / 220 mg/m³	TWA8h 50 ppm / 221 mg/m³
	STEL 100 ppm / 441 mg/m³	STEL15 100 ppm / 442 mg/m³
	Annotations Sk	Notation Skin
Rosin.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Annotations -	Notation -
Ethylbenzene.	TWA8h 100 ppm / 441 mg/m³	TWA8h 100 ppm / 442 mg/m³
	STEL 125 ppm / 552 mg/m³	STEL15 200 ppm / 884 mg/m³
	Annotations Sk	Notation Skin
Zinc Oxide.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Annotations -	Notation -
Butyl Cellosolve.	TWA8h 25 ppm / 123 mg/m³	TWA8h 20 ppm / 98 mg/m³
	STEL 50 ppm / 246 mg/m³	STEL15 50 ppm / 246 mg/m³
	Annotations Sk	Notation Skin
Chlorinated Paraffins, C14-17 (52%).	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Annotations -	Notation -
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Annotations -	Notation -
Toluene.	TWA8h 50 ppm / 191 mg/m³	TWA8h 50 ppm / 192 mg/m³
	STEL 100 ppm / 384 mg/m³	STEL15 100 ppm / 384 mg/m³
	Annotations Sk	Notation Skin
Epoxy Resin (Number Average Molecular Weight ≤ 700).	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Annotations -	Notation -

U.K. - TWA=Time Weighted Average (8hr) - STEL=Short-term exposure limit (15-minute reference period) - H.S.E. Health and Safety Commission.
Europe - TWA = Time Weight Average (8hr) - Measured or calculated in relation to a reference period of 8 hours time-weighted average (TWA) - STEL = Short-term exposure limit - A limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified - SCOEL

Annotations / Notations:
BMGVs: Biological monitoring guidance values.
Carc: Capable of causing cancer and/or heritable genetic damage.
Inh.: Inhalable fraction.
Resp.: Respirable fraction.
Sen: Capable of causing occupational asthma.
Sk: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.
Skin: A skin notation assigned to the occupational exposure limit value indicates the possibility of significant uptake through the skin.

DNEL

DNEL - Not available

PNEC

PNEC - Not available

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.
Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL,
suitable respiratory protection must be worn.

Occupational exposure controls:

Respiratory protection:



If workers could be exposed to concentrations above the exposure limit they should use a respirator to EN 140, fitted with a filter suitable for both particulates and vapours to EN14387, with an assigned protection factor of at least 10 (e.g. A2P3)
Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes.
Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Hand protection:



There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. At repeated or prolonged contact; gloves (EN374).
Viton-gloves offer good protection for intense contact with most solvents, e.g. complete immersion in solvent.
Nitrile gloves offer good protection during spray application.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. The breakthrough time must be greater than the end use time of the product.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occured.

Gloves for repeated or prolonged exposure (Permeation breakthrough times > 480 min) - High Protection:

Material:	Minimum Thickness:	Chemical resistance:
Polyethylene (PE) Gloves	0,062mm	High
Butyl Viton Gloves	0,70mm	High

Gloves for repeated or prolonged exposure (Permeation breakthrough times 240 - 480 min) - High Protection:

Material:	Minimum Thickness:	Chemical resistance:
Polyethylene (PE) Gloves	0,062mm	High
Butyl Viton Gloves	0,70mm	High

Gloves for repeated or prolonged exposure (Permeation breakthrough times 120-240 min) - Medium Protection:

Material:	Minimum Thickness:	Chemical resistance:
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High

Gloves for repeated or prolonged exposure (Permeation breakthrough times 60 - 120 min) - Medium Protection:		
Material:	**Minimum Thickness:**	**Chemical resistance:**
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High

Gloves for short term exposure / splash protection (Permeation breakthrough times 30 - 60 min):		
Material:	**Minimum Thickness:**	**Chemical resistance:**
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High
Nitrile Gloves	0,31mm	High

Gloves for short term exposure / splash protection (Permeation breakthrough times 10 - 30 min):		
Material:	**Minimum Thickness:**	**Chemical resistance:**
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High
Butyl Gloves	0,50mm	High
Nitrile Gloves	0,31mm	High

Non suitable Gloves - non exhaustive list (Permeation breakthrough times < 10 min):	
Material:	**Thickness (or less):**
Natural Rubber Gloves	0,75mm
Nitrile Gloves	0,175mm
Neoprene Gloves	0,75mm
Butyl Gloves	0,3mm

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.
USE PE gloves as under gloves for difficult situations like for instance: high exposure, unknown composition or unknown properties of the chemicals.

Eye protection:



Use safety eyewear designed to protect against splash of liquids (EN166).

Skin protection:



Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

Environmental exposure controls:
Do not allow to enter drains or water courses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Appearance	: Liquid
(b) Odour	: Typical
(c) Odour threshold	: Testing not feasible due to nature of the product.
(d) pH	: Not applicable due to nature of the product.
(e) Melting point/freezing point	: Not applicable due to nature of the product.
(f) Initial boiling point and boiling range	: Not applicable due to nature of the product.
(g) Flash point	: 35°C Method: ASTM D3278-96 / ISO13736
(h) Flammability (solid, gas)	: Not applicable due to nature of the product.
(i) Vapour density	: Heavier than air
(j) Relative density	: 1,64 @ 20ºC Method: ASTM D1475-98
(k) Solubility(ies)	: Not Soluble.
(l) Partition coefficient: n-octanol/water	: Not applicable due to nature of the product.
(m) Auto-ignition temperature / Decomposition temperature	: Testing not feasible due to nature of the product.
(n) Viscosity	: >20,5 mm²/s @40ºC (ISO3219-B)
(o) Explosive properties	: The product itself is not explosive, but the formation of an explosive mixture of vapour or dust with air is possible.
(p) Oxidising properties	: Not applicable due to nature of the product.

Substance name	(q) Explosive limits	(r) Evaporation rate	(s) Vapour pressure
Cuprous(I)Oxide.	Not applicable	Not available	Not applicable
Xylene.	1.0-7.0%	Not available	8.0 mbar
Rosin.	Not applicable	Not available	0,6kPa
Ethylbenzene.	1.2 -8.0 %	Not available	9.3 mbar
Zinc Oxide.	Not applicable	Not available	Not applicable
Butyl Cellosolve.	1.1-10.6%	0,08	1.0 mbar
Chlorinated Paraffins, C14-17 (52%).	Not available	Not available	0,00027hPa
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-	Not available	Not available	0.00195 Pa
Toluene.	1.2-7%	6	29mbar
Epoxy Resin (Number Average Molecular Weight ≤ 700).	Not applicable	Not available	< 0.01 mbar

9.2. Other information
No additional information

SECTION 10: Stability and reactivity

10.1. Reactivity
No specific test data related to reactivity available for this product or its ingredients.

10.2. Chemical stability
Stable under recommended storage and handling conditions (see section 7).

10.3. Possibility of hazardous reactions
In combination with oxidizing agents, strongly alkaline and strongly acid materials, exothermic reactions and/or explosive reactions may occur or toxic vapours may arise.

10.4. Conditions to avoid
When exposed to high temperatures may produce hazardous decomposition products.

10.5. Incompatible materials
Keep away from oxidising agents, strongly alkaline and strongly acid materials.

10.6. Hazardous decomposition products
Carbon monoxide and dioxide, smoke, oxides of nitrogen, hydrochloric acid etc.

SECTION 11: Toxicological information

There are no data available on the mixture itself.
The mixture has been assessed following the additivity method of the CLP Regulation (EC) No 1272/2008 and classified for toxicological hazards accordingly.
See Sections 2 and 3 for details.

11.1. Information on toxicological effects

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.
Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
Solvents may cause some of the above effects by absorption through the skin.
Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
The liquid splashed in the eyes may cause irritation and reversible damage.
Ingestion may cause nausea, diarrhoea and vomiting.
This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.
Contains Rosin., Epoxy Resin (Number Average Molecular Weight ≤ 700). May produce an allergic reaction.

Substance name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cuprous(I)Oxide.	1340 mg/kg bw, Rat	Not available.	3.34 mg/lRat,4h
Xylene.	>2000 mg/kg, Rat	>2000 mg/kg, Rat	29 mg/lRat,4h
Rosin.	Not available.	Not available.	Not available.
Ethylbenzene.	>3000 mg/kg, Rat	>5000 mg/kg, Rabbit	17,8 mg/lRat,4h
Zinc Oxide.	>5000 mg/kg, Rat	Not available.	>5700 mg/m3Rat,4h
Butyl Cellosolve.	>200-2000 mg/kg, Rat	>2000 mg/kg, Rabbit	2-20 mg/lRat,4h
Chlorinated Paraffins, C14-17 (52%).	>2000 mg/kg (bw), Rat	4000 mg/kg, Rat	Not available.
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl	>2000mg/kg, Rat	>2000mg/kg, Rat	>11,1mg/lRat,1h
Toluene.	>2000 mg/kg, Rat	>5000 mg/kg, Rabbit	28,1 mg/lRat,4h
Epoxy Resin (Number Average Molecular Weight ≤ 700).	>15000 mg/kg, Rabbit	23000 mg/kg, Rabbit	Not available.

Conclusion/Summary

Acute Toxicity

ATEmix (oral) : No Specific data.
ATEmix (Dermal) : No Specific data.
ATEmix (Inhalation) : No Specific data.

Skin corrosion/irritation:

Conclusion/Summary on mixture : Causes skin irritation.
: Method: Additivity approach, no testdata available.

Serious eye damage/irritation:

Conclusion/Summary on mixture : Causes serious eye damage.
: Method: Additivity approach, no testdata available.

Respiratory or skin sensitization:

Conclusion/Summary on mixture : May cause an allergic skin reaction.
: Method: Concentration Limit, no testdata available.
: No specific data on Respiratory sensitization.

Germ cell mutagenicity:

Conclusion/Summary on mixture : No Specific data.

Carcinogenicity:

Conclusion/Summary on mixture : No Specific data.

Reproductive toxicity:

Conclusion/Summary on mixture : No Specific data.

STOT - single exposure:

Conclusion/Summary on mixture : No Specific data.

STOT - repeated exposure:

Conclusion/Summary on mixture : May cause damage to organs through prolonged or repeated exposure.
: Method: Concentration Limit, no testdata available.

Aspiration hazard:

Conclusion/Summary on mixture : No Specific data.

Information on likely routes of exposure

Inhalation : Exposure to vapours may cause a health hazard.
Serious effects may be delayed following exposure.

Ingestion : No Specific data.

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

Eye contact : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No Specific data.

Ingestion : No Specific data.

Skin contact : Adverse symptoms may include the following: irritation, redness

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

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No Specific data.

Potential delayed effects : No Specific data.

Long term exposure

Potential immediate effects : No Specific data.

Potential delayed effects : No Specific data.

Potential chronic health effects

Conclusion/Summary : Not available

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available

SECTION 12: Ecological information

There are no data available on the mixture itself. Do not allow to enter drains or water courses.
The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and classified for eco-toxicological hazards accordingly.

12.1. Toxicity

Substance name	Results - Species - Exposure
Cuprous(I)Oxide.	EC50/48h - 9.8 - 41.2 ppb (Daphnia Magna), LC50 - Not available, IC50 - Not available
Xylene.	EC50/48h 1-10 mg/l (Daphnia magna), LC50/96h - 13.4 mg/l Fathead minnow, IC50/72h
Rosin.	EC50 - Not available, LC50 - Not available, IC50 - Not available
Ethylbenzene.	EC50/48h 1,8-2,4 mg/l (Daphnia magna), LC50/96h 12,1 mg/l (Pimephales promelas), IC50 - Not available
Zinc Oxide.	Ac. EC50/72h - 0,17 mg/l (Algae - Selenastrum Capricornutum), Ac. LC50/48h - 98 ug/l Daphnia magna/Neonate <24u ; Ac. LC50/96h - 1,1 tot 2,5 ppm Oncorhynchus mykiss ; Chr. NOEC/48h - 0,4 mg/L Daphnia magna/Neonate, IC50 - Not available
Butyl Cellosolve.	EC50/24h >100 mg/l (Daphnia magna), LC50/96h 1464 mg/l (Oncorhynchus mykiss), IC50 >1000 mg/l (Fish) ; >100 m/l (Algae)
Chlorinated Paraffins, C14-17 (52%).	EC50/48h - 0,006 mg/l (Daphnia magna) ; EC50/96h >3,2 mg/l (Selenastrum capricornutum), LC50/96h >1,0 mg/l (Gammarus pulex) ; LC/96h >5000 mg/l (Alburnus alburnus), IC50 - Not available
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate.	EC50/48h 0,146mg/l (Daphnia magna), LC50/96h 0,6mg/l (Oncorhynchuss mykiss), IC50/72h 0,4042mg/l (Desmodesmus subspicatus)
Toluene.	EC50/48h 11,5 mg/l (Daphnia magna), LC50/96h 13 mg/l (Carassius auratus), IC50/72h 12 mg/l (Pseudo kirchnerella)
Epoxy Resin (Number Average Molecular Weight ≤ 700).	EC50/48h 1,8 mg/l (Daphnia magna), LC50/96h 2 mg/l (Oncorhynchus mykiss), IC50/8h >42,6 mg/l (Bacteria)

12.2. Persistence and degradability

Conclusion/Summary : Not available

12.3. Bioaccumulative potential

Substance name	LogPow	BCF	Potential
Cuprous(I)Oxide.	Not available	Not available	Not available
Xylene.	3,1	25,9	Low
Rosin.	N.A.	<25-130	Not available
Ethylbenzene.	3,6	110 L/kg ww	Not available
Zinc Oxide.	Not available	Not available	Not available
Butyl Cellosolve.	0,81	-	Not available
Chlorinated Paraffins, C14-17 (52%).	7	<2000 L/kg	Not available
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-	5,93	800 L/kg ww	High
Toluene.	2,65	90	Low
Epoxy Resin (Number Average Molecular Weight ≤ 700).	3,242	3 - 31	Low

12.4. Mobility in soil

Soil/water partition coefficient (KOC) : Not available

Mobility : Not available

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of containers contaminated by the product in accordance with local or national legal provisions.
The European Waste Catalogue classification of this product, when disposed of as waste is 08 01 11.
If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information contact your local waste authority.
Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.
Containers which are not properly cleaned may contain (highly) flammable or explosive vapours.
Special precautions:
Use appropriate protective equipment for the removal and / or disposal of this product.

SECTION 14: Transport information

Transport in accordance with ADR/RID/ADN, IMDG and ICAO/IATA.

	ADR/RID/ADN	IMDG	IATA
14.1. UN number	UN 1263	UN 1263	UN 1263
14.2. UN proper shipping name	PAINT	PAINT	PAINT
14.3. Transport hazard class(es)	3	3	3
Hazard labels			
14.4. Packing group	III	III	III
14.5. Environmental hazards	Yes	Yes	No
	Environmental Risk 	Marine Pollutant: Yes  Marine Pollutant Substance(S): Cuprous(I)Oxide., Zinc Oxide.	
14.6. Special precautions for user	Hazard Identification Number: 30	EmS: F-E, S-E	

Transport within the user's premises:
Always transport in closed containers that are upright and secure.
Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
This antifouling paint is registered for use in U.K. under H.S.E.10478
The information in this Safety Data Sheet is required pursuant to
* Annex II to regulation (EC) No 1907/2006 and its amendments.
* the provisions of the Health and Safety at Work etc. Act [and the Control of Substances Hazardous to Health Regulations] apply to the use of this product at work.
The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

* Active ingredients:	Cuprous(I)Oxide. / CAS 1317-39-1	291g/kg.

* Note: Values given are based on theoretical calculations. Actual values could differ.

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

The product is classified and labelled for supply in accordance with Regulation (EC) No 1272/2008.
Rationale:

H226	Measured
H315	Additivity approach
H318	Additivity approach
H317	Concentration limit
H362	Concentration limit
H373	Concentration limit
H400	Summation method
H410	Summation method

Abbreviations and acronyms:

ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE	: Acute Toxicity Estimate
BCF	: Bioconcentration factor
CLP	: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	: Derived No Effect Level
IATA	: International Air Transport Association
IMDG	: International Maritime Dangerous Goods
Kow	: octanol-water partition coefficient
LC50	: Lethal Concentration to 50 % of a test population
LD50	: Lethal Dose to 50% of a test population (Median Lethal Dose)
PBT	: Persistent, Bioaccumulative and Toxic substance
PNEC	: Predicted No Effect Concentration(s)
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT	: Specific Target Organ Toxicity
vPvB	: Very Persistent and Very Bioaccumulative
Note W	: It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung. This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation.

Full text of Hazard Statements appearing in Section 3.2:

EUH066 Repeated exposure may cause skin dryness or cracking.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361d(*) Suspected of damaging the unborn child via inhalation.
H361fd(*) Suspected of damaging fertility or the unborn child if swallowed.
H362 May cause harm to breast-fed children.
H373 May cause damage to organs through prolonged or repeated exposure.
H373(*) May cause damage to central nervous system through prolonged or repeated exposure via inhalation.
H373-(**) May cause damage to organs through prolonged or repeated exposure (hearing organs).
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Amendments: 23-08-2017, §2,3,8,9,11,12&16

This product does not contain organotin compounds acting as biocides and complies with the "International convention on the control of harmful Anti-fouling systems on ships as adopted by IMO in october 2001 (IMO document AFS/CONF/26)".

The information of this SDS is based on the present state of our knowledge and on current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. Unless indicated elsewhere in this safety data sheet, the classification of this mixture has been determined using a combination of test data, bridging principles and calculation.