

SAFETY DATA SHEET

525/C256 - ANTIFOULING 'A' PLUS - RED, WHITE, BLACK & BLUE

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product name	525/C256 - ANTIFOULING 'A' PLUS - RED, WHITE, BLACK & BLUE	
Product number	525/C256/65P/1P/2P/4P	
UFI	UFI: CE3P-H2M2-700E-0KE3	
1.2. Relevant identified uses o	of the substance or mixture and uses advised	d against
Identified uses	AS A COATING TO DISCOURAGE FOULANT FORMATION ON BOAT HULLS AND MARINE STRUCTURES ALSO SUITABLE AS A BOOTTOPPING	
1.3. Details of the supplier of t	he safety data sheet	
Supplier	TEAL & MACKRILL LIMITED Lockwood Street HULL UK HU2 OHN +441482320194 (T) +441482219266 (F) info@teamac.co.uk	TEAL AND MACKRILL EU B.V. Zandvoorrtstaat 69 1976 BN IJMUIDEN THE NETHERLANDS +441482320194 (T) +441482219266 (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		
Emergency telephone	+44 (0) 1482 320194 Teamac (08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri)	
SDS No.	11165	
SECTION 2: Hazards identific	ation	
2.1. Classification of the subst	ance or mixture	
Classification (EC 1272/2008)		
Physical hazards	Flam. Liq. 3 - H226	
Health hazards	Eye Dam. 1 - H318 Skin Sens. 1 - H317	
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
2.2. Label elements		
Hazard pictograms		

Signal word

Danger

Hazard statements	H226 Flammable liquid and vapour. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	 P102 Keep out of reach of children. P101 If medical advice is needed, have product container or label at hand. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	COPPER (1) THIOCYANATE 30.54%, ROSIN 21.07%, ZINC PYRITHIONE 3%
Supplementary precautionary statements	 P270 Do not eat, drink or smoke when using this product. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P370+P378 In case of fire: Use alcohol resistant foam, carbon dioxide or dry powder to extinguish. P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients		
3.2. Mixtures		
COPPER (1) THIOCYANATE 31%		30-60%
CAS number: 1111-67-7	EC number: 207-337-4	
M factor (Acute) = 10	M factor (Chronic) = 1	
Classification	Clas	ssification (67/548/EEC or 1999/45/EC)
Aquatic Acute 1 - H400	Xn;	R20/21/22. R32.
Aquatic Chronic 1 - H410		
ROSIN 21%		10-30%
CAS number: 8050-09-7	EC number: 232-475-7	REACH registration number: 01-
		2119480418-32-0032
Classification	Clas	ssification (67/548/EEC or 1999/45/EC)
Skin Sens. 1 - H317	R43	

Calcium Carbonate			10-30
CAS number: 1317-65-3	EC number: 215-279-6		
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -		
HYDROCARBONS, C9, AROMATICS			10-30
CAS number: —	EC number: 918-668-5	REACH registration number: 01- 2119455851-35-xxxx	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411		sification (67/548/EEC or 1999/45/EC) R65. Xi;R37. N;R51/53. R10,R66,R67.	
HYDROCARBONS C9-C11, <2% AROI	MATICS		5-10
CAS number: —	EC number: 919-857-5	REACH registration number: 01- 2119463258-33-XXXX	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336 Asp. Tox. 1 - H304		sification (67/548/EEC or 1999/45/EC) R65. R10,R66,R67.	
Zinc Oxide			1-5
CAS number: 1314-13-2	EC number: 215-222-5	REACH registration number: 01- 2119463881-32	
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		sification (67/548/EEC or 1999/45/EC) 50/53.	
ZINC PYRITHIONE 3.0%			1-5
CAS number: 13463-41-7	EC number: 236-671-3		
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Acute Tox. 3 - H301 Acute Tox. 3 - H331 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		sification (67/548/EEC or 1999/45/EC) 23. Xn;R22. Xi;R41. N;R50.	

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	If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.	
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.	
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.	
Skin contact	Rinse with water.	
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.	
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.	
4.2. Most important symptoms	and effects, both acute and delayed	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	During application and drying, solvent vapours will be emitted. Vapours in high concentrations are narcotic.	
Ingestion	No specific symptoms known.	
Skin contact	Discoloration of the skin.	
Eye contact	No specific symptoms known. May be slightly irritating to eyes.	
4.3. Indication of any immedia	te medical attention and special treatment needed	
Notes for the doctor	Treat symptomatically.	
SECTION 5: Firefighting meas	sures	
5.1. Extinguishing media		
Suitable extinguishing media	Extinguish with alcohol-resistant 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 fro	om the substance or mixture	
Specific hazards	Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m3. Oxides of carbon. Oxides of nitrogen. Fire creates: Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).	
5.3. Advice for firefighters		
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, pro	tective equipment and emergency procedures	
Personal precautions	Avoid inhalation of vapours and contact with skin and eyes. Ensure suitable respiratory protection is worn during removal of spillages in confined areas.	

6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with
	sand, earth or other suitable non-combustible material. Spillages or uncontrolled discharges
into watercourses must be reported immediately to the Environment	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 upAbsorb spillage with non-combustible, absorbent material. Collect and place in suitable waste
disposal containers and seal securely. Collect and place in suitable waste disposal containers
and seal securely. 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 Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Vapours may accumulate on the floor and in low-lying areas. Use explosion proof electric equipment. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. 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 container tightly closed. Keep containers upright. Protect from light. Store in closed original container at temperatures between 5°C and 25°C. Store away from the following materials: Oxidising materials. Acids. Alkalis.
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 of Dangerous Substances: DSEAR. Up to 250 litres of liquids with a flashpoint above 32C but below 55C 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)

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

COPPER (1) THIOCYANATE 31%

Long-term exposure limit (8-hour TWA): OES 1.0 Cu mg/m3 total dust Short-term exposure limit (15-minute): OES 2.0 Cu mg/m3 total dust

Calcium Carbonate

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

HYDROCARBONS, C9, AROMATICS

Long-term exposure limit (8-hour TWA): WEL 19 ppm 100 mg/m³ vapour

ZINC PYRITHIONE 3.0%

Long-term exposure limit (8-hour TWA): WEL 0.35 mg/m³

WEL = Workplace Exposure Limit.

ROSIN 21% (CAS: 8050-09-7)

DNEL	Workers - Dermal; Long term : 25 mg/kg/day Workers - Inhalation; Long term : 176.32 mg/m³ General population - Dermal; Long term : 15 mg/kg/day General population - Inhalation; Long term : 52.174 mg/m³ General population - Oral; Long term : 15 mg/kg/day		
PNEC	 Fresh water; 0.005 mg/l marine water; 0.0005 mg/l STP; 1000 mg/l Sediment (Marinewater); 10.8 mg/kg Soil; 21.4 mg/kg 		
HYDROCARBONS, C9, AROMATICS			
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/m ³ Industry - Dermal; Long term systemic effects: 25 mg/kg/day Industry - Inhalation; Long term systemic effects: 150 mg/m ³		
PNEC	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.		
	HYDROCARBONS C9-C11, <2% AROMATICS		
DNEL	Industry - Inhalation; Long term systemic effects: 1500 mg/m³ Consumer - Oral; Long term systemic effects: 300 mg/kg/day Consumer - Dermal; Long term systemic effects: 300 mg/kg/day Industry - Dermal; Long term systemic effects: 300 mg/kg/day Consumer - Inhalation; Long term systemic effects: 900 mg/m³		
PNEC	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.		
Zinc Oxide (CAS: 1314-13-2)			
DNEL	Professional - Dermal; Long term systemic effects: 83 mg/kg/day Professional - Inhalation; Long term systemic effects: 5 mg/m ³ Consumer - Inhalation; Long term systemic effects: 2.5 mg/m ³ Consumer - Dermal; Long term systemic effects: 83 mg/kg/day Consumer - Oral; Long term systemic effects: 0.83 mg/kg		

PNEC

- Fresh water; 0.0206 mg/l
- marine water; 0.0061 mg/l
- Sediment (Freshwater); 117 mg/kg
- STP; 0.1 mg/l
- Sediment (Marinewater); 56.5 mg/kg
- Soil; 35.6 mg/kg

8.2. Exposure controls

Protective equipment









Appropriate engineering Provide adequate general and local exhaust ventilation. Observe any occupational exposure controls limits for the product or ingredients. PREVENT CHILDREN TOUCHING WET PAINT. Unprotected persons should be kept away Personal protection from treated areas. Eye/face protection Wear chemical splash goggles. Hand protection To protect hands from chemicals, gloves should comply with European Standards EN388 and 374. As a general principle, exposure should be managed by means other than the provision of protective gloves. Manufacturers' performance data suggest that the optimum glove for use should be: Polyvinyl alcohol (PVA). Thickness: ≥ 0.2 - 0.3 mm or Polyethylene. Thickness: ≥ 0.062 mm Permeation breakthrough time according to EN374 - class: (1-6) e.g. minimum 480 mins. Caution: The performance of gloves under actual working conditions can be significantly affected by many factors and the information provided according to EN374 may not accord with what is achieved in practice. We recommend that expert professional advice is sought that takes into account of the work processes and working environment applicable for each task where gloves are to be worn. Other skin and body Wear suitable protective clothing (coveralls of a contrasting colour to the product being protection applied, underneath a disposable coverall with hood), suitable gloves and impervious footwear that protects the lower leg Hygiene measures Use engineering controls to reduce air contamination to permissible exposure level. Wash promptly with soap and water if skin becomes contaminated. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Respiratory protection Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. If ventilation is inadequate, suitable respiratory protection must be worn. Disposable filtering half mask respirators should comply with European Standard EN149 or EN405. Use respiratory equipment with gas filter, type A2. Only PROFESSIONALS are permitted to apply this product by spray. Air-fed respiratory protective equipment with combined helmet and visor should be worn when this product is sprayed. This should be in addition to other measures to reduce exposure (e.g. in booth design and operation and process modifications). Environmental exposure INPORTANT: Application, maintenance and repair activities must be conducted within a controls contained area to prevent losses and minimise emissions to the environment. This means activities must take place on impermeable hard standings with bunding or on soil covered with an impermeable material. Any losses or waste containing antifouling biocides shall be collected for reuse or disposal.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid. Coloured liquid.	
Colour	Various colours	
Odour	Characteristic. Organic solvents.	
Odour threshold	Not determined.	
рН	Technically not feasible.	
Melting point	Not determined.	
Initial boiling point and range	Not determined.	
Flash point	38°C Closed cup.	
Evaporation rate	Not determined.	
Evaporation factor	Not determined.	
Upper/lower flammability or explosive limits	: 0.8	
Other flammability	Not determined.	
Vapour pressure	Not determined.	
Vapour density	heavier than air	
Relative density	1.41 - 1.49 @ @ 20C°C	
Solubility(ies)	Insoluble in water	
Partition coefficient	Not determined.	
Auto-ignition temperature	Not determined.	
Decomposition Temperature	Not determined.	
Viscosity	5.0 (ICI Rotothinner) P @ 25°C	
Explosive properties	Not determined.	
Explosive under the influence of a flame	Not considered to be explosive.	
Oxidising properties	Not determined.	
9.2. Other information		
SECTION 10: Stability and rea	Ictivity	
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 hazardous	10.3. Possibility of hazardous reactions	
Possibility of hazardous reactions	Not determined.	
10.4. Conditions to avoid		
Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Acids. Oxidising agents.	

10.5. Incompatible materials

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Materials to avoid	Strong alkalis. Strong acids. Strong oxidising agents.	
10.6. Hazardous decompositio	n products	
Hazardous decomposition products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.	
SECTION 11: Toxicological inf	formation	
11.1. Information on toxicologi	cal effects	
Toxicological effects	No data recorded.	
Acute toxicity - oral ATE oral (mg/kg)	3,331.11	
Acute toxicity - inhalation ATE inhalation (gases ppm)	23,317.79	
ATE inhalation (vapours mg/l)	99.93	
ATE inhalation (dusts/mists mg/l)	16.66	
General information	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.	
Inhalation	May cause respiratory system irritation. Vapours in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting. The product contains organic solvents. Overexposure may depress the central nervous system, causing dizziness and intoxication.	
Ingestion	Liquid irritates mucous membranes and may cause abdominal pain if swallowed. May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea. May cause nausea, headache, dizziness and intoxication.	
Skin contact	May be absorbed through the skin. Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema.	
Eye contact	Irritation of eyes and mucous membranes.	
Route of exposure	Inhalation Skin absorption. Ingestion. Skin and/or eye contact.	
Toxicological information on ingredients.		

ROSIN 21%

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	2,800.0
Species	Rat
ATE oral (mg/kg)	2,800.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	2,001.0
Species	Rabbit

ATE dermal (mg/kg)	2,001.0
	HYDROCARBONS, C9, AROMATICS
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	3,492.0
Species	Rat
Notes (oral LD ₅₀)	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	3,492.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	3,160.0
Species	Rabbit
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	3,160.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC∞ vapours mg/l)	6,193.0
Species	Rat
Notes (inhalation LC ₅₀)	Based on available data the classification criteria are not met.
ATE inhalation (vapours mg/l)	6,193.0
Skin corrosion/irritation	
Animal data	Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritati	on
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.

Reproductive toxicity - development	Based on available data the classification criteria are not met.	
Specific target organ toxicit	y - single exposure	
STOT - single exposure	STOT SE 3 - H335, H336 May cause respiratory irritation. May cause drowsiness or dizziness.	
Target organs	Respiratory system, lungs Central nervous system	
Specific target organ toxicit	y - repeated exposure	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.	
Aspiration hazard		
Aspiration hazard	Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways. Pneumonia may be the result if vomited material containing solvents reaches the lungs.	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	A single exposure may cause the following adverse effects: Irritation of nose, throat and airway. Difficulty in breathing. Coughing. Vapours may cause headache, fatigue, dizziness and nausea. Central nervous system depression. During application and drying, solvent vapours will be emitted. Vapours in high concentrations are narcotic.	
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.	
Skin contact	Repeated exposure may cause skin dryness or cracking. Discoloration of the skin.	
Eye contact	May cause temporary eye irritation.	
Route of exposure	Ingestion Inhalation Skin and/or eye contact	
Target organs	Central nervous system Respiratory system, lungs	
	Zinc Oxide	
Acute toxicity - oral		
Acute toxicity oral (LD₅₀ mg/kg)	5,100.0	
Species	Rat	
ATE oral (mg/kg)	5,100.0	
Acute toxicity - dermal		
Acute toxicity dermal (LD₅ mg/kg)	5,100.0	
Species	Rat	
ATE dermal (mg/kg)	5,100.0	
Acute toxicity - inhalation		

	Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	5.71
	Species	Rat
	ATE inhalation (dusts/mists mg/l)	5.71
		ZINC PYRITHIONE 3.0%
	Acute toxicity - oral	
	ATE oral (mg/kg)	100.0
	Acute toxicity - dermal	
	Acute toxicity dermal (LD₅₀ mg/kg)	2,000.0
	Species	Rat
	Skin corrosion/irritation	
	Animal data	Not irritating.
	Respiratory sensitisation	
	Respiratory sensitisation Not sensitising.	
	Skin sensitisation	
	Skin sensitisation Not sensitising.	
	Carcinogenicity	
	Carcinogenicity	There is no evidence that the product can cause cancer.
	Specific target organ toxicit	
		Not classified as a specific target organ toxicant after repeated exposure.
SECTION 1	2: Ecological information	
Ecotoxicity	icity There are no data on the ecotoxicity of this product. The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.	
12.1. Toxicit	<u>y</u>	
Ecological ir	nformation on ingredients.	
		COPPER (1) THIOCYANATE 31%
	Acute aquatic toxicity	
	LE(C)50	$0.01 < L(E)C50 \le 0.1$
	M factor (Acute)	10
	Acute toxicity - fish	LC50, > 96 hours: 0.07 mg/l, Lepomis macrochirus (Bluegill)
	Chronic aquatic toxicity	
	M factor (Chronic)	1
		ROSIN 21%
	Acute aquatic toxicity	

Acute toxicity - fish	LL₅₀, 96 hours: >1000 mg/l, Brachydanio rerio (Zebra Fish)	
Acute toxicity - aquatic invertebrates	EC∞, 48 hours: 911 mg/l, Daphnia magna	
Acute toxicity - aquatic plants	EC₀₀, 72 hours: >1000 mg/l,	
	HYDROCARBONS, C9, AROMATICS	
Toxicity	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.	
Acute aquatic toxicity		
Acute toxicity - fish	LC₅₀, 96 hours: 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)	
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 3.2 mg/l, Daphnia magna	
Acute toxicity - microorganisms	EC₅₀, 48 hours: 2.9 mg/l,	
Chronic aquatic toxicity		
Chronic toxicity - fish early life stage	NOEC, 28 days: 1.23 mg/l, Oncorhynchus mykiss (Rainbow trout)	
Chronic toxicity - aquatic invertebrates	NOEC, 21 : 2.14 mg/l, Daphnia magna	
	Zinc Oxide	
Acute aquatic toxicity		
LE(C)50	0.1 < L(E)C50 ≤ 1	
M factor (Acute)	1	
Acute toxicity - fish	LC50, 96 hours: 1.1 to 2.5 ppm , Oncorhynchus mykiss (Rainbow trout)	
Acute toxicity - aquatic	EC₅o, 48 hours: 1 mg/l, Daphnia magna	

invertebrates NOEC, 48 hours: 0.4 mg/l, Daphnia magna

Acute toxicity - aquatic	EC₅₀, 72 hours: 0.17 mg/l, Selenastrum capricornutum
plants	NOEC, 72 hours: 0.017 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

NOEC 0.01	< NOEC ≤ 0.1
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Degradability	Non-rapidly degradable

1

M factor (Chronic)

ZINC PYRITHIONE 3.0%

Acute aquatic toxicity	
LE(C)50	$0.1 \le L(E)C50 \le 1$
M factor (Acute)	1
Acute toxicity - fish	LC50, ~ 96 hours: 0.0026 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - invertebrates	aquatic	EC₅₀, ~ 48 hours: 0.0082 mg/l, Daphnia magna
Acute toxicity - plants	aquatic	EC₅₀, 96 hours: 0.0012 mg/l, Marinewater algae
Chronic aquati	c toxicity	
M factor (Chro	nic)	1
12.2. Persistence and degra	dability	
Persistence and degradabili		available.
Ecological information on ing	gredients.	
		ROSIN 21%
Persistence an degradability	d	The product is readily biodegradable.
Biodegradation	1	- Degradation 71%: 28 days
		HYDROCARBONS, C9, AROMATICS
Persistence an degradability	d	The degradability of the product is not known.
Biodegradation	I	- 78%: 28 days
		ZINC PYRITHIONE 3.0%
Persistence an degradability	d	The product is readily biodegradable.
12.3. Bioaccumulative potential		
Bioaccumulative potential No data available on bioaccumulation.		
Partition coefficient	Partition coefficient Not determined.	
Ecological information on ingredients.		
		ROSIN 21%
Partition coeffic	cient	log Kow: > 6 Probably
		HYDROCARBONS, C9, AROMATICS
Bioaccumulativ	e potential	No data available on bioaccumulation.
Partition coeffic	-	Not available.
		Zine Quide
		Zinc Oxide
Partition coeffic	cient	log Pow: 2.2
		ZINC PYRITHIONE 3.0%
Bioaccumulativ	e potential	BCF: 50,
Partition coeffic		log Pow: 0.93

12.4. Mobility in soil

Mobility

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

Ecological information on ingredients.

HYDROCARBONS, C9, AROMATICS

Mobility

No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB. assessment

Ecological information on ingredients.

HYDROCARBONS, C9, AROMATICS

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. assessment

ZINC PYRITHIONE 3.0%

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. assessment

12.6. Other adverse effects

Other adverse effects The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

Ecological information on ingredients.

HYDROCARBONS, C9, AROMATICS

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General informationWaste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in
accordance with the requirements of the local Waste Disposal Authority.Waste classWhen 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)	1263

UN No. (IMDG)	1263
UN No. (ICAO)	1263
14.2. UN proper shipping name	Ð
Proper shipping name (ADR/RID)	PAINT
Proper shipping name (IMDG)	PAINT
Proper shipping name (ICAO)	PAINT
14.3. Transport hazard class(e	s)
ADR/RID class	3
IMDG class	3
ICAO class/division	3
Transport labels	



14.4. Packing group	
ADR/RID packing group	III
IMDG packing group	Ш
ICAO packing group	111

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS

Tunnel restriction code (D/E)

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

F-E, S-E

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

SECTION 15: Regulatory information

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

National regulationsThis product is approved under the Control of Pesticides Regulations 1986. Product C259/-
series - H.S.E. No.8375.

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).
	amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	 ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. GHS: Globally Harmonized System. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. LCso: Lethal Concentration to 50 % of a test population. LDso: Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. vPvB: Very Persistent and Very Bioaccumulative. MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. cATpE: Converted Acute Toxicity Point Estimate. BCF: Bioconcentration Factor. ECso: 50% of maximal Effective Concentration.
Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic) Asp. Tox. = Aspiration hazard Carc. = Carcinogenicity Eye Dam. = Serious eye damage Eye Irrit. = Eye irritation Flam. Liq. = Flammable liquid Repr. = Reproductive toxicity Resp. Sens. = Respiratory sensitisation Skin Corr. = Skin corrosion Skin Irrit. = Skin irritation Skin Sens. = Skin sensitisation STOT RE = Specific target organ toxicity-repeated exposure STOT SE = Specific target organ toxicity-single exposure
Training advice	It is recommended that all users of these materials should ensure that they are properly trained in the operation, use and working practices associated with this class of products. This may be in the form of supervised experience, manufacturers training or preferably nationally accredited training courses.

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. 2015/830 Revision to sections 2, 8, 11 & 12 for reclassification of solvents. Unique Formula Identifier (UFI) added Addition of EU supplier information
Issued by	Technical Dept. (P.E.)
Revision date	05/01/2021
Revision	6.2
Supersedes date	16/12/2020
SDS number	11165
SDS status	Approved.
Hazard statements in full	 H226 Flammable liquid and vapour. H301 Toxic if swallowed. H304 May be fatal if swallowed and enters airways. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H331 Toxic if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. 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.
Signature	Initials

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.