



SAFETY DATA SHEET
525/C258 - ANTIFOULING 'D' PLUS -ALL COLOURS

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

1.1. Product identifier

Product name 525/C258 - ANTIFOULING 'D' PLUS -ALL COLOURS
Product No. 525/C258/2P, 3P, 4P, 5P

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

Identified uses AS A COATING TO DISCOURAGE FOULANT FORMATION ON BOAT HULLS AND MARINE STRUCTURES

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 (EC 1272/2008)
Physical and Chemical Hazards Flam. Liq. 3 - H226
Human health Acute Tox. 4 - H302;Skin Sens. 1 - H317;STOT SE 3 - H336
Environment Aquatic Acute 1 - H400;Aquatic Chronic 1 - H410
Classification (1999/45/EEC) Xn;R22. R43. N;R50/53. R10, R67.
The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Contains CUPROUS OXIDE
ROSIN
Label In Accordance With (EC) No. 1272/2008



Signal Word Warning
Hazard Statements H226 Flammable liquid and vapour.
H302 Harmful if swallowed.

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H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.
 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.
 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.
 P501A Dispose of contents/container to special waste collection point

Supplementary Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P270 Do not eat, drink or smoke when using this product.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P261 Avoid breathing vapour/spray.
 P264 Wash contaminated skin thoroughly after handling.
 P321 Specific treatment (see medical advice on this label).
 P370+378 In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
 P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P302+352 IF ON SKIN: Wash with plenty of soap and water.
 P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.
 P330 Rinse mouth.
 P333+313 If skin irritation or rash occurs: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P391 Collect spillage.
 P403+233 Store in a well-ventilated place. Keep container tightly closed.
 P403+235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

CUPROUS OXIDE	28.10 - 29.31 % w/w
CAS-No.: 1317-39-1	EC No.: 215-270-7
Classification (EC 1272/2008) Acute Tox. 4 - H302 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC) Xn;R22. N;R50/53.

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ROSIN	20.73 - 21.33 % w/w
CAS-No.: 8050-09-7	EC No.: 232-475-7
Registration Number: 01-2119480418-32-0032	
Classification (EC 1272/2008) Skin Sens. 1 - H317	Classification (67/548/EEC) R43
Calcium Carbonate	10-30%
CAS-No.: 1317-65-3	EC No.: 215-279-6
Classification (EC 1272/2008) Not classified.	
Classification (67/548/EEC) Not classified.	
Hydrocarbons, C9, aromatics	10-30%
CAS-No.:	EC No.: 918-668-5
Registration Number: 01-2119455851-35-xxxx	
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. Xi;R37. N;R51/53. R10,R66,R67.
WHITE SPIRIT	5-10%
CAS-No.:	EC No.: 919-446-0
Registration 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.
Zinc Oxide	1-5%
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.
ZINC PYRITHIONE	2.83 - 2.86 % w/w
CAS-No.: 13463-41-7	EC No.: 236-671-3
Classification (EC 1272/2008) Acute Tox. 5 - H303 Acute Tox. 3 - H331 Eye Dam. 1 - H318 Aquatic Acute 1 - H400	
Classification (67/548/EEC) T;R23. Xn;R22. Xi;R41. N;R50.	

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ETHANOL		<1%
CAS-No.: 64-17-5	EC No.: 200-578-6	Registration Number: 01-2119457610-43-xxxx
Classification (EC 1272/2008) Flam. Liq. 2 - H225	Classification (67/548/EEC) F;R11	

METHANOL		<0.1%
CAS-No.: 67-56-1	EC No.: 200-659-6	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370	Classification (67/548/EEC) F;R11 T;R23/24/25,R39/23/24/25	

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

Get medical attention if any discomfort continues.

Inhalation

Move into fresh air and keep at rest. Perform artificial respiration if breathing has stopped. Place unconscious person on the side in the recovery position and ensure breathing can take place.

Ingestion

Get medical attention immediately! DO NOT INDUCE VOMITING!

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. DO NOT use solvents or thinners

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Immediately flush with plenty of water or eyewash solution for up to 10 minutes. Consult a physician for specific advice.

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

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 recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

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 from the substance or mixture

Specific hazards

In case of fire, toxic gases may be formed (COx, NOx). Fire creates: Acrid smoke/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

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5.3. Advice for firefighters

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours and contact with skin and eyes. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses. 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

Collect with absorbent, non-combustible material into suitable 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

Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Risk of vapour concentration 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

Keep containers tightly closed. Keep upright. Protect from light, including direct sunrays. Store in closed original container at temperatures between 5°C and 25°C. Store separated from: Oxidising material. 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)

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
Calcium Carbonate	WEL		10 mg/m3			
CUPROUS OXIDE	WEL		1 as Cu mg/m3 total dust		2 as Cu mg/m3 total dust	
ETHANOL	WEL	1000 ppm	1920 mg/m3			
Hydrocarbons, C9, aromatics	WEL	19 ppm	100 mg/m3			
METHANOL	WEL	200 ppm(Sk)	266 mg/m3(Sk)	250 ppm(Sk)	333 mg/m3(Sk)	
ROSIN	WEL		0,05 mg/m3		0,15 mg/m3	Sen
WHITE SPIRIT	WEL		350 mg/m3			
Zinc Oxide	WEL		5 mg/m3		10 mg/m3	
ZINC PYRITHIONE	WEL		0.35 mg/m3			

WEL = Workplace Exposure Limit.

Sen = Capable of causing occupational asthma.

ROSIN (CAS: 8050-09-7)

DNEL				
Industry	Dermal	Long Term	25	mg/kg/day
Industry	Inhalation.	Long Term	176.32	mg/kg/day
Consumer	Dermal	Long Term	15	mg/kg/day
Consumer	Inhalation.	Long Term	52.174	mg/kg/day
Consumer	Oral	Long Term	15	mg/kg/day
PNEC				
Freshwater	0.005	mg/l		
Marinewater	0.0005	mg/l		
STP	1000	mg/l		
Sediment (Freshwater)	108	mg/kg		
Sediment (Marinewater)	10.8	mg/kg		
Soil	21.4	mg/kg		

Zinc Oxide (CAS: 1314-13-2)

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)	70.3	mg/kg		
Soil	44.3	mg/kg		

WHITE SPIRIT

DNEL				
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, 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/m3
Industry	Dermal	Long Term	Systemic Effects	25 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	100 mg/m3

8.2. Exposure controls

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Protective equipment



Process conditions

Use engineering controls to reduce air contamination to permissible exposure level.

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. In case of inadequate ventilation, use air-supplied full-mask. 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).

Hand protection

Wear protective gloves. 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 suitable protective clothing (coveralls of a contrasting colour to the product being applied, underneath a disposable coverall with hood), suitable gloves and impervious footwear that protects the lower leg

Hygiene measures

Wash promptly with soap & water if skin becomes contaminated. Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Personal protection

Unprotected persons should be kept away from treated areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Coloured liquid. Viscous liquid.
Colour	Red. Black. Blue. Grey. Green.
Odour	of solvents
Solubility	Insoluble in water
Relative density	1.44 - 1.62 20C
Vapour density (air=1)	Heavier than air
Viscosity	4.5 Ps 25C Rotothinner
Flash point (°C)	38 CC (Closed cup).
Auto Ignition Temperature (°C)	400

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

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Avoid contact with acids and oxidising substances.

10.5. Incompatible materials

Materials To Avoid

Oxydising agents and strongly acidic materials.

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**

Toxicological information

No data recorded.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

May cause irritation to the respiratory system. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication.

Ingestion

Liquid irritates mucous membranes and may cause abdominal pain if swallowed. May irritate and cause stomach pain, vomiting and diarrhoea. May cause nausea, headache, dizziness and intoxication.

Skin contact

May be absorbed through the skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

Eye contact

Irritation of eyes and mucous membranes.

Route of entry

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

Toxicological information on ingredients.

Toxic Dose 1 - LD 50

2800 mg/kg (oral rat)

ROSIN (CAS: 8050-09-7)

Zinc Oxide (CAS: 1314-13-2)

Acute toxicity:

Acute Toxicity (Oral LD50)

15000 mg/kg Rat

Acute Toxicity (Inhalation LC50)

> 5700 mg/l (dust/mist) Rat 4 hours

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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

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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.

ZINC PYRITHIONE (CAS: 13463-41-7)

Acute toxicity:

Acute Toxicity (Oral LD50)

269 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

Acute Toxicity (Inhalation LC50)

1.03 mg/l (dust/mist) Rat 4 hours

Skin Corrosion/Irritation:

Not irritating.

Respiratory or skin sensitisation:

Not sensitising.

Not Sensitising.

Carcinogenicity:

This substance has no evidence of carcinogenic properties.

Specific target organ toxicity - repeated exposure:

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

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CUPROUS OXIDE (CAS: 1317-39-1)

Toxic Dose 1 - LD 50

Harmful if swallowed mg/kg (oral rat)

Skin Corrosion/Irritation:

Not irritating.

Serious eye damage/irritation:

Not Irritating.

Respiratory or skin sensitisation:

Epidemiological studies have shown no evidence of skin sensitisation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

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.

Ecological information on ingredients.

CUPROUS OXIDE (CAS: 1317-39-1)

Ecotoxicity

The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

525/C258 - ANTIFOULING 'D' PLUS -ALL COLOURSEcological information on ingredients.**ROSIN (CAS: 8050-09-7)**

Acute Toxicity - Fish
 NOEC 96 hours 1 mg/l Brachydanio rerio (Zebra Fish)
 Acute Toxicity - Aquatic Invertebrates
 NOEC 48 hours 10 mg/l Daphnia magna
 Acute Toxicity - Aquatic Plants
 NOEC 72 hours 100 mg/l Selenastrum capricornutum

Zinc Oxide (CAS: 1314-13-2)

LC50 96 hours 1.1 to 2.5 ppm Onchorhynchus mykiss (Rainbow trout)
 Acute Toxicity - Aquatic Invertebrates
 EC50 48 hours 1 mg/l Daphnia magna
 NOEC 48 hours 0.4 mg/l Daphnia magna
 Acute Toxicity - Aquatic Plants
 EC50 72 hours 0.17 mg/l Selenastrum capricornutum
 NOEC 72 hours 0.017 mg/l Selenastrum capricornutum

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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

ZINC PYRITHIONE (CAS: 13463-41-7)

Acute Toxicity - Fish
 LC50 96 hours ~ 0.0026 mg/l Pimephales promelas (Fat-head Minnow)
 Acute Toxicity - Aquatic Invertebrates
 EC50 48 hours ~ 0.0082 mg/l Daphnia magna
 Acute Toxicity - Aquatic Plants
 EC50 96 hours 0.0012 mg/l Marinewater algae

CUPROUS OXIDE (CAS: 1317-39-1)

Acute Fish Toxicity
 Very toxic to aquatic organisms.

12.2. Persistence and degradability

Degradability
 No data available.

525/C258 - ANTIFOULING 'D' PLUS -ALL COLOURSEcological information on ingredients.ROSIN (CAS: 8050-09-7)

Degradability

The product is not readily biodegradable.

Biodegradation

Degradation (64%) 28 days

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

ZINC PYRITHIONE (CAS: 13463-41-7)

Degradability

The product is easily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Ecological information on ingredients.ROSIN (CAS: 8050-09-7)

Partition coefficient

log Kow > 6

Zinc Oxide (CAS: 1314-13-2)

Partition coefficient

log Pow 2.2

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.

ZINC PYRITHIONE (CAS: 13463-41-7)

Bioaccumulation factor

BCF 50

Partition coefficient

log Pow 0.93

12.4. Mobility in soil

Mobility:

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

Ecological information on ingredients.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.

525/C258 - ANTIFOULING 'D' PLUS -ALL COLOURS**12.5. Results of PBT and vPvB assessment**Ecological information on ingredients.**WHITE SPIRIT**

Not Classified as PBT/vPvB by current EU criteria.

Hydrocarbons, C9, aromatics

Not Classified as PBT/vPvB by current EU criteria.

ZINC PYRITHIONE (CAS: 13463-41-7)

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.**WHITE SPIRIT**

This substance may contribute to ozone formation in the near surface atmosphere. However, the photochemical formation of ozone depends on 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

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.1. Waste treatment methods

Do not allow runoff to sewer, waterway or ground.

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 1, 2, 4-Trimethylbenzene, Class 3, PG III, (41 °C c.c.) and Copper (1) Oxide, MARINE POLLUTANTS
Proper Shipping Name	PAINT

14.3. Transport hazard class(es)

ADR/RID/ADN Class	1263
ADR/RID/ADN Class	Class 3: Flammable liquids.
IMDG Class	3

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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).

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

This product is approved under the Control of Pesticides Regulations 1986. Product C/258/Series - H.S.E. No. 7218.

15.2. Chemical Safety Assessment

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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 Update for CLP labelling.

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 Revision 9
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 Safety Data Sheet Status Approved.
 Date Date Printed
 Signature Initials

Risk Phrases In Full

R10 Flammable.
 R22 Harmful if swallowed.
 R65 Harmful: may cause lung damage if swallowed.
 R11 Highly flammable
 R37 Irritating to respiratory system.
 R43 May cause sensitisation by skin contact.
 NC Not classified.
 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.
 R23 Toxic by inhalation.
 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.
 R50 Very toxic to aquatic organisms.

Hazard Statements In Full

H370 Causes damage to organs <<Organs>>.
 H318 Causes serious eye damage.
 H226 Flammable liquid and vapour.
 H302 Harmful if swallowed.
 H225 Highly flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 H303 May be harmful if swallowed.
 H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.
 H335 May cause respiratory irritation.
 EUH066 Repeated exposure may cause skin dryness or cracking.
 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.