SAFETY DATA SHEET
TROPICAL KILLA ANTIFOULING - RED

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME
TROPICAL KILLA ANTIFOULING - RED

SUPPLIER
TEAL & MACKRILL LIMITED
LOCKWOOD STREET
HULL
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info@teamac.co.uk

PRODUCT NO.
525/C262/65

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

CONTACT PERSON
Technical Department - 08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri as above

2 HAZARDS IDENTIFICATION

Flammable. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Irritating to eyes, respiratory system and skin.

CLASSIFICATION (1999/45)
Xi;R36/37/38. R43. N;R51/53. R10.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification (67/548)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPPER (I) OXIDE</td>
<td>215-270-7</td>
<td>1317-39-1</td>
<td>10-30%</td>
<td>Xn;R22 N;R50/53</td>
</tr>
<tr>
<td>ROSIN</td>
<td>232-475-7</td>
<td>8050-09-7</td>
<td>5-10%</td>
<td>R43</td>
</tr>
<tr>
<td>SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPH.</td>
<td>265-191-7</td>
<td>64742-88-7</td>
<td>5-10%</td>
<td>Xn;R65. N;R51/53. R10,R66.</td>
</tr>
<tr>
<td>SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.; LOW BOILING POINT NAPHTHA</td>
<td>265-199-0</td>
<td>64742-95-6</td>
<td>5-10%</td>
<td>Xn;R65.</td>
</tr>
<tr>
<td>1,2,4-TRIMETHYLBENZENE</td>
<td>202-436-9</td>
<td>95-63-6</td>
<td>1-5%</td>
<td>R10 Xn;R20 Xi;R36/37/38 N;R51/53</td>
</tr>
<tr>
<td>White spirit</td>
<td>265-185-4</td>
<td>64742-82-1</td>
<td>1-5%</td>
<td>Xn;R65. N;R51/53. R10.</td>
</tr>
<tr>
<td>NAPHTHA (PETROLEUM), HYDRODESULFURIZED HEAVY</td>
<td>265-185-4</td>
<td>64742-82-1</td>
<td>&lt;1%</td>
<td>Xn;R65. N;R51/53. R10,R66,R67.</td>
</tr>
<tr>
<td>XYLENE</td>
<td>215-535-7</td>
<td>1330-20-7</td>
<td>&lt;1%</td>
<td>R10 Xn;R20/21 Xi;R38</td>
</tr>
<tr>
<td>ETHYL BENZENE</td>
<td>202-849-4</td>
<td>100-41-4</td>
<td>&lt;1%</td>
<td>F,R11 Xn;R20</td>
</tr>
<tr>
<td>CUMENE</td>
<td>202-704-5</td>
<td>98-82-8</td>
<td>&lt;1%</td>
<td>R10 Xn;R65 Xi;R37 N;R51/53</td>
</tr>
<tr>
<td>MESITYLENE</td>
<td>203-604-4</td>
<td>108-67-8</td>
<td>&lt;1%</td>
<td>R10 Xi;R37 N;R51/53</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>200-578-6</td>
<td>64-17-5</td>
<td>&lt;1%</td>
<td>F,R11</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION
Get medical attention if any discomfort continues.
TROPICAL KILLA ANTI-FOULING - RED

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

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.

5 FIRE-FIGHTING MEASURES

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.

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

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

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
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.

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.

SPILL CLEAN UP METHODS
Collect with absorbent, non-combustible material into suitable containers. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
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.

STORAGE PRECAUTIONS

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 32°C but below 55°C may be kept in a workroom provided they are kept in closed containers in a marked, fire-resistant 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.

8 EXPOSURE CONTROLS/PERSOAL PROTECTION
TROPICAL KILLA ANTIFOULING - RED

<table>
<thead>
<tr>
<th>Name</th>
<th>Std</th>
<th>TWA - 8 hrs</th>
<th>STEL - 15 min</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,4-TRIMETHYL BENZENE</td>
<td>WEL</td>
<td>25 ppm(Sk)</td>
<td>125 mg/m3(Sk)</td>
<td>50 ppm(Sk) 250 mg/m3(Sk)</td>
</tr>
<tr>
<td>CUMENE</td>
<td>WEL</td>
<td>1000 ppm</td>
<td>1920 mg/m3</td>
<td></td>
</tr>
<tr>
<td>ETHANOL</td>
<td>WEL</td>
<td>100 ppm(Sk)</td>
<td>441 mg/m3(Sk)</td>
<td>125 ppm(Sk) 552 mg/m3(Sk)</td>
</tr>
<tr>
<td>ETHYLBENZENE</td>
<td>WEL</td>
<td>50 ppm(Sk)</td>
<td>220 mg/m3(Sk)</td>
<td>100 ppm(Sk) 441 mg/m3(Sk)</td>
</tr>
<tr>
<td>XYLENE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WEL = Workplace Exposure Limit.

INGREDIENT COMMENTS
WEL = Workplace Exposure Limits

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.

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.

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.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE    Coloured liquid
COLOUR        Red
ODOUR         of solvents
SOLUBILITY    Insoluble in water
RELATIVE DENSITY 1.48 - 1.52 @ 20°C
VOLATILE BY VOL. (%) 40
FLASH POINT (°C) 38 C approx. CC (Closed cup).
VAPOUR DENSITY (air=1) heavier than air
VISCOSITY 4.5 Ps @ 25°C
VOLATILE ORGANIC COMPOUND (VOC) 383

10 STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions and recommended use.

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

MATERIALS TO AVOID

HAZARDOUS DECOMPOSITION PRODUCTS
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
# TROPICAL KILLA ANTIFOULING - RED

## 11 TOXICOLOGICAL INFORMATION

### 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.

## 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

There are no data on the ecotoxicity of this product. The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

### BIOACCUMULATION

No data available on bioaccumulation.

### DEGRADABILITY

No data available.

## 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.

### DISPOSAL 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).

## 14 TRANSPORT INFORMATION

### GENERAL

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

### UK ROAD CLASS

3

### PROPER SHIPPING NAME

PAINT
TROPICAL KILLA ANTIFOULING - RED

PROPER SHIPPING NAME: Contains Solvent Naphtha (Petroleum) & Trimethylbenzene, Class 3, PG III, (38 °C c.c.), MARINE POLLUTANTS

UN NO. ROAD: 1263
ADR CLASS NO.: 1263
ADR PACK GROUP: III
UN NO. SEA: 1263
IMDG PACK GR.: III
UN NO. AIR: 1263
AIR PACK GR.: III

UK ROAD PACK GR.: III
ADR CLASS: Class 3: Flammable liquids.
TUNNEL RESTRICTION CODE: (D/E)

15 REGULATORY INFORMATION

LABELLING

Irritant
Dangerous for the environment
CONTAINS: ROSIN

RISK PHRASES

R10 Flammable.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R36/37/38 Irritating to eyes, respiratory system and skin.

SAFETY PHRASES

S2 Keep out of the reach of children.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
S37 Wear suitable gloves.
S46 If swallowed, seek medical advice immediately and show this container or label.
S51 Use only in well-ventilated areas.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.
S64 If swallowed, rinse mouth with water (only if the person is conscious).

UK REGULATORY REFERENCES

ENVIRONMENTAL LISTING

EU DIRECTIVES

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.
APPROVED CODE OF PRACTICE

GUIDANCE NOTES

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

16 OTHER INFORMATION

REVISION COMMENTS
Issued in new format for Reach compliance Corrections to Section 14, Transport Information

ISSUED BY
Technical Dept. (P.E.)

REVISION DATE 08/02/2010

REV. NO./REPL. SDS GENERATED 3

SDS NO. 10871

SAFETY DATA SHEET STATUS
Approved.

DATE Date Printed ............................................

SIGNATURE Initials ............................................

RISK PHRASES IN FULL

R10 Flammable.
R20/21 Harmful by inhalation and in contact with skin.
R20 Harmful by inhalation.
R22 Harmful if swallowed.
R65 Harmful: may cause lung damage if swallowed.
R11 Highly flammable.
R36/37/38 Irritating to eyes, respiratory system and skin.
R37 Irritating to respiratory system.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
R66 Repeated exposure may cause skin dryness or cracking.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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 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.