1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

Product Name: MYSTOX CTB-DIDP
Use(s): Antimicrobial for textile polymer coatings
Company Identification: MURPHY AND SON LIMITED
ALPINE STREET, OLD BASFORD
NOTTINGHAM
NG6 0HQ, UNITED KINGDOM

Emergency telephone: 01462 457186 (24hrs)

2. HAZARDS IDENTIFICATION

Physical & Chemical: NON HAZARDOUS
Health: MAY CAUSE SENSITISATION BY SKIN CONTACT
THE PRODUCT CONTAINS A SUBSTANCE THAT HAS A WORKPLACE EXPOSURE LIMIT.
Environmental: TOXIC TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation: BLEND OF ORGANIC SUBSTANCES

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>EINECS/ELINCS</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI-ISODECYL PHTHALATE</td>
<td>68515-49-1</td>
<td>271-091-4</td>
<td>N.C.</td>
<td>85-95%</td>
</tr>
<tr>
<td>(±)-1-((2-(2,4-DICHLOROPHENYL)-4-PROPYL-1,3-DIOXOLAN-2-YL)-METHYL)-1H-1,2,4-TRIAZOLE</td>
<td>60207-90-1</td>
<td>262-104-4</td>
<td>Xn: R22, Xi: R43, N: R50, 53</td>
<td>3-5%</td>
</tr>
<tr>
<td>CARBAMIC ACID, BUTYL-, 3-IODO-2-PROPYNYL ESTER</td>
<td>55406-53-6</td>
<td>259-627-5</td>
<td>Xn: R20/22, Xi: R41, N: R50</td>
<td>3-5%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General information: Remove contaminated clothing immediately, to be disposed of or washed before reuse.
Inhalation: If inhaled, provide fresh air, warmth, rest and if necessary, seek medical advice.
Skin contact: Wash contaminated skin with soap and large quantities of water. If necessary, seek medical advice.
Eye contact: Wash eyes thoroughly with plenty of water until irritation subsides. If irritation persists, consult an eye specialist/ophtalmologist
Ingestion: Allow the patient to vomit on his own accord. Give copious water to drink; if necessary seek medical advice.
5. FIRE FIGHTING MEASURES

General hazard
THE PRODUCT IS NOT FLAMMABLE

Extinguishing media
To suit local surroundings (e.g. carbon dioxide, foam or chemical powder)

Extinguishing media not to be used
Water jet

Special exposure hazards
The thermal decomposition products released should be considered toxic if inhaled.

Protective equipment
Wear self-contained breathing apparatus.

Further information
Avoid run-off water entering the drains (e.g. use barriers)

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up
Adhere to personal protective measures. Take up with absorbent material, e.g. sand, sawdust into tightly closable containers. Label container and dispose of as prescribed.

Environmental considerations
Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once.

7. HANDLING & STORAGE

Advice on safe handling
Handle in accordance with good hygiene and safety practice.

Storage conditions
Ensure adequate ventilation of the storage area. Keep containers tightly closed and dry, and away from sources of ignition and direct sunlight.

Further information
Keep away from incompatible substances (e.g. oxidising agents) Test plastic compatibility prior to use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls
Workplace Exposure Limits (WELs) have been assigned by the HSE (EH40/2005)

<table>
<thead>
<tr>
<th>Exposure Level</th>
<th>Limit (ppm)</th>
<th>Limit (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTEL (8 hour TWA)</td>
<td>ppm</td>
<td>5</td>
</tr>
<tr>
<td>STEL (15 minutes)</td>
<td>ppm</td>
<td>mg/m³</td>
</tr>
</tbody>
</table>

Engineering controls
Ensure adequate ventilation of working area

Personal protection
Observe normal standards for handling chemicals. As a precaution, it is recommended that those with a medical history of sensitisation should not handle this product. Avoid contact with skin and eyes. Wash hands before breaks and after work. Wear personal protective equipment appropriate to the task (see below)

Eye protection
Safety goggles (e.g. EN 166)

Skin protection
PVC or rubber gloves (also consider your own risk assessment; e.g. breakthrough times, rates of diffusion and degradation, tasks undertaken)

Respiratory protection
Approved respirator if appropriate.

Other protection
Protective overall, antistatic footwear.
9. PHYSICAL & CHEMICAL PROPERTIES

Physical form: Clear free flowing liquid
Colour: Amber
Odour: Mild ester
pH: Not applicable.
Boiling pt / range: From 250 °C
Melting pt / range: From -50 °C
Flash point: Approx. 225 °C Data for the phthalate
Autoflammability: Approx. 410 °C Data for the phthalate
Density: 1.0 g/cm³
Explosive limits: Lower: % (v/v) Higher: % (v/v)
Viscosity: Not determined
Vapour pressure: Not determined
Water solubility: Insoluble

10. STABILITY & REACTIVITY

Stability: Stable under normal conditions of handling.
Thermal decomposition: None known.
Conditions to avoid: None known.
Material to avoid: Oxidising agents
Hazardous reactions: None known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD₅₀ rat (oral) mg/kg No data available
Dermal compatibility: Mild skin irritation possible after prolonged contact.
Mucous membrane compatibility: May be slightly irritating to eyes.
Further information: In high dose chronic studies in rats, early offspring mortality has been observed.

12. ECOLOGICAL INFORMATION

Acute toxicity: LC₅₀ Fish 5.3 mg/l 96 hours (triazole)
EC₅₀ Daphnia magna 10.2 mg/l 48 hours (triazole)
EC₅₀ Algae (S subspicatus) 0.76 mg/l 72 hours (triazole)
Degradability: The phthalate is readily degradable and not expected to be harmful to aquatic organisms.
13. DISPOSAL CONSIDERATIONS

Advice on disposal

In accordance with national and local authority regulations, e.g. The Hazardous Waste (England & Wales) Regulations 2005.

Contaminated packaging

Treat empty containers in the same way as the product or if possible wash out thoroughly and recycle.

14. TRANSPORT INFORMATION

United Nations number
UN 3082

Packaging group
III

IMDG code
9/3082/III

RID / ADR
9, III

ICAO / IATA
The product should not be marked as a marine pollutant

Marine pollutant

Proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((±)-1-((2-(2,4-DICHLOROPHENYL)-4-PROPYL-1,3-DIOXOLAN-2-YL)-METHYL)-1H-1,2,4- TRIAZOLE)

15. REGULATORY INFORMATION

Classification & labelling

The product is classified in accordance with the Chemicals (Hazard Information and Packaging for Supply) Regulations [CHIP 3.1] Contains (±)-1-((2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-y1)-methyl)-1h-1,2,4- triazole

Risk phrases

R43 MAY CAUSE SENSITISATION BY SKIN CONTACT
R51/53 TOXIC TO AQUATIC ORGANISMS; MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

Safety phrases

S24 AVOID CONTACT WITH SKIN
S60 THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE.
S61 AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEET.

Comply with the Control of Substances Hazardous to Health Regulations (COSHH) as amended.
16. OTHER INFORMATION

Further information
The SDS has been revised in the following sections: 1; 2; 3;

Sources of data
Approved Supply List, Approved Carriage List, and other suppliers’ safety data sheets

Risk phrases referred to in section 2

R20: Harmful by inhalation
R22: Harmful if swallowed.
R41: Risk of serious damage to eyes.
R43: May cause sensitisation by skin contact
R50: Very toxic to aquatic organisms
R53: May cause long-term adverse effects in the aquatic environment.

Date of issue
05-08-2008

This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific properties.