SAFETY DATA SHEET
CREOSOTE

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

PRODUCT NAME
CREOSOTE

CAS-No. 8001-58-9

EC No. 232-287-5

SUPPLIER
Bartoline Limited
Barmston Close
Beverley
East Yorkshire
HU17 0LW
Tel. 01482 678710
Fax 01482 872606
HSE Manager
Email info@bartoline.co.uk

APPLICATION
A wood preservative for use by professional operators against wood rotting fungi and wood destroying insects on external timbers.

EMERGENCY TELEPHONE 01482 678727 0800-1700

2 HAZARDS IDENTIFICATION

Harmful in contact with skin and if swallowed. May cause cancer. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Irritating to eyes, respiratory system and skin.

CLASSIFICATION (1999/45) Carc. Cat. 1;R45. Xn;R21/22. Xi;R36/37/38. N;R50/53.

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>BENZ(A)ANTHRACENE</td>
<td>200-280-6</td>
<td>56-55-3</td>
<td>5-10%</td>
<td>Carc. Cat. 2,R45 N,R50/53</td>
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<tr>
<td>CRESOL Mixed Isomers</td>
<td>215-293-2</td>
<td>1319-77-3</td>
<td>&lt; 1%</td>
<td>T;R24/25 C;R34</td>
</tr>
<tr>
<td>DIPHENYL</td>
<td>202-163-5</td>
<td>92-52-4</td>
<td>5-10%</td>
<td>Xi;R36/37/38 N;R50/53</td>
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<tr>
<td>NAPHTHALENE</td>
<td>202-049-5</td>
<td>91-20-3</td>
<td>&lt; 1%</td>
<td>Carc. Cat. 3,R40 Xn;R22 N;R50/53</td>
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<tr>
<td>PHENOL</td>
<td>203-632-7</td>
<td>108-95-2</td>
<td>&lt; 1%</td>
<td>Muta. Cat. 3,R68 T;R23/24/25 C;R34 Xn;R48/20/21/22</td>
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<td>XYLENOL</td>
<td>215-089-3</td>
<td>1300-71-6</td>
<td>1-5%</td>
<td>T;R24/25 C,R34 N;R51/53</td>
</tr>
</tbody>
</table>

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

EC No. 232-287-5
CAS-No. 8001-58-9

COMPOSITION COMMENTS
This coal tar product is a complex mixture of constituents of variable composition.

4 FIRST-AID MEASURES

INHALATION
Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.
Place unconscious person on the side in the recovery position and ensure breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration.

INGESTION
Get medical attention immediately! Rinse mouth thoroughly. Provide rest, warmth and fresh air. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn’t enter the lungs.
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SKIN CONTACT
Remove affected person from source of contamination. Promptly wash contaminated skin with water. Promptly remove clothing if soaked through and wash the skin with water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

EYE CONTACT
Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Extinguish with foam, carbon dioxide, dry powder or water fog.

SPECIAL FIRE FIGHTING PROCEDURES
Keep up-wind to avoid fumes. Move container from fire area if it can be done without risk. Use supplied air respirator if product is involved in a fire. Containers close to fire should be removed or cooled with water.

UNUSUAL FIRE & EXPLOSION HAZARDS
No unusual fire or explosion hazards noted.

SPECIFIC HAZARDS
When heated and in case of fire, toxic vapours/gases may be formed.

PROTECTIVE MEASURES IN FIRE
Wear full protective clothing. Use air-supplied respirator during fire fighting.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS
Do not allow ANY environmental contamination. Never use water by itself on spillage; this will spread the spill and cause further contamination. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS
Wear necessary protective equipment. Absorb small quantities with paper towels and evaporate in safe place (fume hood). Allow sufficient time for vapours to completely clear the hood ducts, then burn the paper in a location away from combustible materials. Flush spilled material into suitable retaining areas or container with large quantities of water.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

USAGE DESCRIPTION
Apply by brush, dipping or spraying. DO NOT spray on windy days and protect plants from splashes.

STORAGE PRECAUTIONS
Store in tightly closed original container in a dry and cool place.

STORAGE CLASS
Toxic storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

<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>CRESOL Mixed Isomers</td>
<td>OES</td>
<td>5 ppm(Sk)</td>
<td>22 mg/m3(Sk)</td>
<td></td>
</tr>
<tr>
<td>DIPHENYL</td>
<td>OES</td>
<td>0.2 ppm</td>
<td>1.3 mg/m3</td>
<td>0.6 ppm 3.8 mg/m3</td>
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<tr>
<td>NAPHTHALENE</td>
<td>OEL</td>
<td>50 mg/m3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHENOL</td>
<td>WEL</td>
<td>2 ppm(Sk)</td>
<td>7.8 mg/m3(Sk)</td>
<td>Sk</td>
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</tbody>
</table>

WEL = Workplace Exposure Limit.

OEL = Occupational Exposure Limit.
Sk = Can be absorbed through skin.

PROTECTIVE EQUIPMENT
PROCESS CONDITIONS
DO NOT use on internal timbers of residential property. Although outdoor use will not normally require any respiratory protection, it is recommended that users who are in contact with the product for long periods use a respirator which conforms to EN141 with a Type A2-P2 filter.

ENGINEERING MEASURES
Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

RESPIRATORY EQUIPMENT
If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION
Use protective gloves made of: Rubber, neoprene or PVC.

EYE PROTECTION
Wear approved chemical safety goggles where eye exposure is reasonably probable.

OTHER PROTECTION
Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

HYGIENE MEASURES
Use appropriate skin cream to prevent drying of skin. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. DO NOT SMOKE IN WORK AREA!

SKIN PROTECTION
Wash hands after use and wash off any adhesive which comes into contact with skin.

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<td>COLOUR</td>
</tr>
<tr>
<td>ODOUR</td>
</tr>
<tr>
<td>SOLUBILITY</td>
</tr>
<tr>
<td>BOILING POINT (°C)</td>
</tr>
<tr>
<td>RELATIVE DENSITY</td>
</tr>
<tr>
<td>VAPOUR DENSITY (air=1)</td>
</tr>
<tr>
<td>FLASH POINT (°C)</td>
</tr>
<tr>
<td>VOLATILE ORGANIC COMPOUND (VOC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10 STABILITY AND REACTIVITY</th>
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<tbody>
<tr>
<td>STABILITY</td>
</tr>
<tr>
<td>CONDITIONS TO AVOID</td>
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<tr>
<td>HAZARDOUS POLYMERISATION</td>
</tr>
<tr>
<td>MATERIALS TO AVOID</td>
</tr>
<tr>
<td>HAZARDOUS DECOMPOSITION PRODUCTS</td>
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</tbody>
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<thead>
<tr>
<th>11 TOXICOLOGICAL INFORMATION</th>
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<tbody>
<tr>
<td>TOXICOLOGICAL INFORMATION</td>
</tr>
<tr>
<td>GENERAL INFORMATION</td>
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</tbody>
</table>
CREOSOTE

INHALATION
SHORT TERM: The substance as a whole may cause irritation. One or more constituents may cause nausea, vomiting, headache, central nervous system effects, blood disorders and eye damage. LONG TERM: The substance as a whole may cause nausea, vomiting and headache. One or more constituents may cause irritation, central nervous system damage, liver cancer, kidney cancer, nasal cancer and lung cancer.

INGESTION
SHORT TERM: The substance as a whole may cause irritation (possibly severe), changes in body temperature, nausea, vomiting, difficulty breathing, irregular heartbeat, headache, dizziness, bluish skin colour and convulsions. LONG TERM: The substance as a whole may cause irritation, nausea, vomiting, headache, gastrointestinal effects, dizziness, changes in body temperature, visual disturbances, difficulty breathing, irregular heartbeat, bluish skin colour and cardiovascular collapse. One or more of the constituents may cause liver cancer.

SKIN CONTACT
SHORT TERM: The substance as a whole may cause irritation (possibly severe), thermal burns from heated material, skin discolouration, skin disorders, sensitivity to sunlight, changes in body temperature, nausea, vomiting, headache, difficulty breathing, irregular heartbeat, bluish skin colour and convulsions. One or more constituents may cause bluish skin colour and convulsions. One or more constituents may cause central nervous system damage. LONG TERM: The substance as a whole may cause dermatitis, skin discolouration, skin disorders, sensitivity to sunlight, changes in body temperature, nausea, vomiting, headache, difficulty breathing, irregular heartbeat, bluish skin colour, lung cancer and skin cancer.

EYE CONTACT
SHORT TERM: The substance as a whole may cause irritation (possibly severe), sensitivity to sunlight. LONG TERM: The substance as a whole may cause irritation and sensitivity to sunlight.

ROUTE OF ENTRY
Ingestion. Skin and/or eye contact. Inhalation. Skin absorption.

TARGET ORGANS

12 ECOLOGICAL INFORMATION

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

MOBILITY
The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. The product is insoluble in water and will spread on the water surface.

BIOACCUMULATION
No data available on bioaccumulation.

DEGRADABILITY
Expected to be slowly but ultimately biodegradable.

ACUTE FISH TOXICITY
Toxic to aquatic environment and may cause long term adverse effects.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION
Waste is classified as hazardous waste. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste, residue, empty containers, discarded work clothes and used disposable towels must be collected in designated receptacles, labelled with content. The packaging should be collected for reuse. Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

DISPOSAL METHODS
Liquid components can be disposed of by incineration. Waste material is classified as hazardous waste and should be disposed of by incineration or collected by a registered waste disposal company, operating within the scope of the Hazardous waste Regulations 2005 in the UK or local equivalent regulations in other countries.

14 TRANSPORT INFORMATION

UK ROAD CLASS 9
PROPER SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID NOS (CREOSOTE OIL)
CREOSOTE

UN NO. ROAD 3082
UK ROAD PACK GR. III
ADR CLASS NO. 9
ADR CLASS ADR CLASS
ADR PACK GROUP III
TUNNEL RESTRICTION CODE (E)
HAZARD NO. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances.
ADR LABEL NO. 9
RID CLASS NO. 9
UN NO. SEA 3082
IMDG PACK GR. III
EMS F-A, S-F
MARINE POLLUTANT YES
UN NO. AIR 9

15 REGULATORY INFORMATION

LABELLING

Toxic
Dangerous for the environment

CONTAINS
BENZ(A)ANTHRACENE

RISK PHRASES
R21/22 Harmful in contact with skin and if swallowed.
R45 May cause cancer.
R50/53 Very 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
P11 Restricted to professional users.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SYNTHETIC RUBBER/PVC GLOVES AND EYE PROTECTION when using.

AVOID EXCESSIVE CONTAMINATION OF COVERALLS AND LAUNDER REGULARLY.

DO NOT BREATHE SPRAY MIST. Otherwise wear respiratory protective equipment and eye protection (see HSE Guidance booklet HS (G) 53. Respiratory protective equipment - a practical guide for users.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

TAKE OFF IMMEDIATELY all contaminated clothing.

DO NOT CONTAMINATE FOODSTUFFS, EATING UTENSILS OR FOOD CONTACT SURFACES.

COVER WATER STORAGE TANKS before application.

UNPROTECTED PERSONS AND ANIMALS SHOULD BE KEPT AWAY FROM TREATED AREAS FOR 48 HOURS OR UNTIL SURFACES ARE DRY.

THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way.

DO NOT APPLY in the presence of naked flames, hot surfaces or unprotected electrical equipment.

DANGEROUS TO FISH AND OTHER AQUATIC LIFE.

DO NOT CONTAMINATE watercourses or ground.

ALL BATS ARE PROTECTED UNDER THE WILDLIFE AND COUNTRYSIDE ACT 1981. BEFORE TREATING ANY STRUCTURE USED BY BATS, CONSULT ENGLISH NATURE, SCOTTISH NATURAL HERITAGE OR THE COUNTRYSIDE COUNCIL FOR WALES.

AVOID ALL CONTACT WITH PLANT LIFE.

DO NOT USE ON INTERNAL TIMBERS OF RESIDENTIAL PROPERTY.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

WASH HANDS AND EXPOSED SKIN before meals and after use.

WASH SPLASHES from skin or eyes immediately.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

IF YOU FEEL UNWELL, seek medical advice (show the label where possible).
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ENSURE ADEQUATE VENTILATION when applying.
VENTILATE TREATED AREAS THOROUGHLY after application.

UK REGULATORY REFERENCES

ENVIRONMENTAL LISTING

EU DIRECTIVES
System of specific information relating to Dangerous Preparations. 2001/58/EC.

APPROVED CODE OF PRACTICE
Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES
Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

NATIONAL REGULATIONS

16 OTHER INFORMATION

GENERAL INFORMATION
WHEN USED FOR THE PURPOSE OF PRESERVING WOOD THIS MATERIAL IS REGULATED UNDER THE CONTROL OF PESTICIDES REGULATIONS 1986

REVISION DATE 13/04/2010

REV. NO./REPL. SDS GENERATED 1

RISK PHRASES IN FULL
R34 Causes burns.
R22 Harmful if swallowed.
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R40 Limited evidence of a carcinogenic effect.
R45 May cause cancer.
R68 Possible risk of irreversible effects.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R24/25 Toxic in contact with skin and if swallowed.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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 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.