SAFETY DATA SHEET  
SDS No. 071/01/09

Conforms to 91/155/EEC as amended by 2001/58/EC

SECTION 1  
IDENTITY OF SUBSTANCE/PREPARATION & COMPANY

COMPANY/UNDERTAKING: Advanced Chemical Specialties Limited
9, Bofors Park, Artillery Road, Yeovil, Somerset, BA22 8YH
℡ 01935-414012. ifax 01935-414022.  info@acslimited.co.uk

PRODUCT NAME: BORACOL 5RH  
HSE No: 8984

DESCRIPTION: A READY TO USE BIOCIDE FOR APPLICATION TO TIMBER AND MASONRY TO PROTECT
AGAINST MOULDS, FUNGI, ALGAE AND WOOD DESTROYING INSECTS. FOR BRUSH,
SPRAY OR DIP APPLICATION

SECTION 2  
COMPOSITION/INFORMATION ON COMPONENTS

Substances in the preparation that require classification under The Chemicals (Hazard Information and Packaging
for Supply) Regulations 2009 (CHIPS 4), or for which workplace exposure limits have been set.

<table>
<thead>
<tr>
<th>Substance</th>
<th>R-Symbol</th>
<th>R-Phrase</th>
<th>CAS No</th>
<th>% in preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium Octoborate Tetrahydrate (DOT)</td>
<td>T (repr)</td>
<td>60/61</td>
<td>12280-03-04</td>
<td>3-4.71%</td>
</tr>
<tr>
<td>1,2 Ethandiol</td>
<td>Xn</td>
<td>22</td>
<td>107-21-1</td>
<td>5-10%</td>
</tr>
<tr>
<td>Benzyl-C8-18-alkyldimethyl</td>
<td>C, N</td>
<td>21/22, 34, 50</td>
<td>61789-71-7</td>
<td>1-3%</td>
</tr>
<tr>
<td>Chlorides (Quaternary ammonium compounds)</td>
<td></td>
<td></td>
<td></td>
<td>83 – 91%</td>
</tr>
</tbody>
</table>

All in aqueous medium

SECTION 3  
HAZARD IDENTIFICATION

Classification of the preparation in accordance with The Chemicals (Hazard Information and Packaging for Supply)
Regulations 2003 (CHIPS 3) and The Control of Pesticides Regulations (as amended 1997)

Not Classified

SECTION 4  
FIRST AID MEASURES

SWALLOWING
Rinse mouth and administer 1-pint warm water (cold if not available). Do not induce vomiting - seek
medical attention immediately. Never administer anything by mouth to an unconscious person. See
also Section 11 (Toxicological Information).

EYES
Flush with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs.

INHALATION
Remove patient to fresh air, keep warm and at rest. Seek medical attention immediately.

SKIN
Remove contaminated clothing and wash affected areas with soap and water. Launder contaminated
clothing before re-use. If irritation occurs, consult a doctor.

SECTION 5  
FIRE FIGHTING MEASURES  
EAC - N/A

EXTINGUISHING MEDIA
Product is non-combustible. Essentially an aqueous solution.

PPE : FIRE
Neoprene/PVC or synthetic gloves, chemical resistant boots and clothing. Breathing
apparatus in the event of smoke evolution.

PRODUCTS OF COMBUSTION
Exposure to extreme heat may liberate water vapour with trace quantities of Hydrogen
Chloride and Oxides of Nitrogen and Carbon.

PPE : SPILLAGE
Neoprene/PVC or synthetic rubber gloves and eye/face protection and chemical resistant
boots.

OTHER INFORMATION (FIRE)

NONE
SECTION 6  ACCIDENTAL RELEASE/SPILLAGE CONTROL MEASURES

Where possible, wearing suitable protective clothing and without taking personal risk, shut off or remove source of leak. Absorb spillage with sand/sawdust or vermiculite and place into suitable HDPE/plastic drum, seal and mark container with contents to await disposal. Wash down remaining or small spills with copious water.

If product has entered watercourses or ditches inform Police, Environment Agency or Fire Brigade.

SECTION 7  HANDLING AND STORAGE

Wear suitable gloves (Neoprene/PVC or Nitrile to EN 374), coveralls and eye/face protection. Store in original container, tightly closed, in a safe place, locked up out of reach of children. NEVER STORE THIS PRODUCT, OR ANY OTHER CHEMICAL IN A FOOD OR DRINK CONTAINER – EVEN IF CORRECTLY LABELLED. Store apart from food, drink and animal feedstuffs. Do not contaminate surfaces on which food is prepared, stored or eaten.

SECTION 8  EXPOSURE CONTROLS/PPE

Wear suitable gloves, (neoprene/PVC or synthetic rubber), coveralls and eye/face protection. If spraying, wear suitable respiratory protection. When using, do not eat, drink or smoke and wash hands and exposed skin before meals and after work.

Engineering controls of operator exposure may replace PPE if it provides equal or a higher degree of protection (i.e. local exhaust ventilation, non-atomizing spray, dip application etc).

Do not apply to surfaces where food is prepared, stored or eaten. Remove or cover all foodstuffs, food preparation equipment, food contact surfaces, cover water storage tanks and fish bowls before application. Keep unprotected persons and animals away from treated surfaces for 48 hours or until surfaces are dry or covered. Avoid excessive contamination of coveralls and launder regularly.

SECTION 9  PHYSICAL/CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPEARANCE:</td>
<td>Clear/Amber liquid</td>
</tr>
<tr>
<td>ODOUR:</td>
<td>Slight</td>
</tr>
<tr>
<td>pH:</td>
<td>8</td>
</tr>
<tr>
<td>BOILING POINT:</td>
<td>100 °C</td>
</tr>
<tr>
<td>MELTING POINT:</td>
<td>N/A</td>
</tr>
<tr>
<td>EXPLOSIVE PROPERTIES:</td>
<td>None</td>
</tr>
<tr>
<td>VAPOUR PRESSURE:</td>
<td>N/A</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER:</td>
<td>Soluble</td>
</tr>
<tr>
<td>SOLUBILITY IN SOLVENT:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>PARTITION COEFFICIENT:</td>
<td>N/A</td>
</tr>
<tr>
<td>FLASH POINT:</td>
<td>&gt;100°C</td>
</tr>
<tr>
<td>AUTO IGNITION:</td>
<td>Not Known</td>
</tr>
<tr>
<td>OXIDISING PROPERTIES:</td>
<td>None</td>
</tr>
<tr>
<td>DENSITY:</td>
<td>1.09 - 1.16g/cm³</td>
</tr>
<tr>
<td>(SPECIFY SOLVENT):</td>
<td>n-Octanol/Water</td>
</tr>
</tbody>
</table>

SECTION 10  STABILITY AND REACTIVITY

Stable and non-reactive under normal conditions of handling and storage. Protect from frost.
PRODUCT NAME: BORACOL 5Rh

INCOMPATIBLE SUBSTANCES

Strong Oxidizing Agents

SECTION 11  TOXICOLOGICAL INFORMATION

LD₅₀ & LC₅₀ values for components listed in section 2.

<table>
<thead>
<tr>
<th>Component</th>
<th>Test</th>
<th>Result</th>
<th>Route</th>
<th>Target Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium Octaborate Tetrahydrate</td>
<td>LD₅₀</td>
<td>2550mg/kg</td>
<td>Oral</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td>LD₅₀</td>
<td>&gt;2000mg/kg</td>
<td>Dermal</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Monoethylene Glycol (1,2 Etandiol)</td>
<td>LD₅₀</td>
<td>200-2000mg/kg</td>
<td>Oral</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td>LD₅₀</td>
<td>&gt;2000mg/kg</td>
<td>Dermal</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Benzyl-C8-18-alkyldimethyl chlorides</td>
<td>LD₅₀</td>
<td>750mg/kg</td>
<td>Oral</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td>LD₅₀</td>
<td>1560mg/kg</td>
<td>Dermal</td>
<td>Rat</td>
</tr>
</tbody>
</table>

EFFECTS OF ACUTE (OVER) EXPOSURE

SKIN:
Possible reddening at the site of contact possible accompanied by itching/stinging.

EYES:
Watering, soreness and severe irritation.

INHALATION:
Due to the low volatility of the product there should be no hazard associated with inhalation under normal conditions of use. Excessive inhalation of spray mist may cause irritation of nasal passages and mucous membranes, cough, confusion or dizziness.

INGESTION:
* Abdominal pains, nausea, vomiting, possible reddening of the mouth and gastric tract.

*NB. Medical personnel should be aware that this product contains a small quantity of 1,2 Ethandiol which can be dangerous in high doses. Medical Personnel should contact the nearest Poisons Unit for further advice on the use of oral ethanol to block the toxic aldehyde.

SECTION 12  ECOLOGICAL INFORMATION

Ecotoxicity Data

<table>
<thead>
<tr>
<th>Component</th>
<th>Test</th>
<th>Result</th>
<th>Period</th>
<th>Target Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl-C8-18-alkyldimethyl chlorides</td>
<td>EC₅₀</td>
<td>0.03mg/l</td>
<td>48-hours</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td></td>
<td>EC₅₀</td>
<td>0.06mg/l</td>
<td>96-hours</td>
<td>Algae</td>
</tr>
<tr>
<td></td>
<td>LC₅₀</td>
<td>1.7mg/l</td>
<td>96-hours</td>
<td>Trout</td>
</tr>
<tr>
<td></td>
<td>EC₂₀</td>
<td>10.0mg/l</td>
<td>0.5-hours</td>
<td>Activated Sludge</td>
</tr>
<tr>
<td>Disodium Octaborate Tetrahydrate</td>
<td>LC₅₀</td>
<td>74.0mg/l</td>
<td>96-hours</td>
<td>Dab</td>
</tr>
<tr>
<td>Tetrahydrate</td>
<td>LC₅₀</td>
<td>88.0mg/l</td>
<td>32 days</td>
<td>Fish (Trout)</td>
</tr>
<tr>
<td></td>
<td>LC₅₀</td>
<td>530.0mg/l</td>
<td>48-hours</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Monoethylene Glycol</td>
<td>EC₅₀</td>
<td>100mg/l</td>
<td>24-hours</td>
<td>Daphnia</td>
</tr>
</tbody>
</table>

Do not allow product, waste or empty container to contaminate ponds, waterways, ditches, drains or water storage tanks. Harmful to aquatic life. Possibly phytotoxic – avoid contact with plantlife

Benzyl-C8-18-alkyldimethyl, chlorides (Quaternary Ammonium compound) is fully biodegradeable (OECD Method 301 D shows 60% degradation after 28 days - Rhodia)

No potential to bioaccumulate.

Active components are readily removed by bioelimination at sewerage treatment plants.

SECTION 13  WASTE DISPOSAL

Dispose of Waste in accordance with the Environmental Protection Act 1990 at a site approved and licensed by the Local Authority, operated by a competent approved and licensed Waste Disposal Contractor.

Cleaned and empty containers may be sent for re-cycling (HDPE) (remove the label). Intermediate bulk containers should be sent to the manufacturer for re-use (do not remove label unless completely decontaminated).

Duty of Care Waste Transfer Form should specify: Pesticide Product HSE No: 8984.
4. **PRODUCT:** BORACOL 5Rh

### SECTION 14  TRANSPORT PRECAUTIONS

<table>
<thead>
<tr>
<th>PACKAGING GROUP</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARD CLASS</td>
<td>N/A</td>
</tr>
<tr>
<td>UN No.</td>
<td>N/A</td>
</tr>
<tr>
<td>TREM CARD No.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**OTHER INFORMATION**

In mixed loads stow apart from food, drink and animal foodstuffs. Not restricted under ADR current UK or international legislation

### SECTION 15  REGULATORY INFORMATION

This product has been assessed and classified according to The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (CHIPS 4) and The Control of Pesticides Regulations (as amended) 1997 (and Northern Ireland), and ascribed the following risk phrases.

**R-Phrase(s):** None Ascribed

**S-Phrases:**

- Amateur:
  - Wear suitable protective clothing and suitable gloves. Do not breathe spray. Otherwise wear respiratory protective equipment and eye protection (see HSE Guidance Booklet HS (G) 53: The Selection Use and Maintenance of Respiratory Protective Equipment – A Practical Guide). DO NOT CONTAMINATE FOODSTUFFS, EATING UTENSILS OR FOOR CONTACT SURFACES. This material and its container must be disposed of in a safe way. EXCLUDE ALL UNPROTECTED PERSONS AND ANIMALS DURING TREATMENT AND FOR AT LEAST 1 HOUR AFTER TREATMENT IS COMPLETED. COVER ALL WATER STORAGE TANKS before application. DO NOT USE NEAR DRAINS, PREVENT ANY SURFACE RUN-OFF FROM ENTERING DRAINS. REMOVE OR COVER ALL FISH TANKS AND BOWLS before application. ALL BATS ARE PROTECTED UNDER THE WILDLIFE AND COUNTRYSIDE ACT 1981. BEFORE TREATING ANY STRUCTURE USED BY BATS, CONSULT NATURAL ENGLAND, SCOTTISH NATURAL HERITAGE OR THE COUNTRYSIDE COUNCIL FOR WALES.
  - WASH ANY CONTAMINATION from skin or eyes immediately
  - WASH HANDS AND EXPOSED SKIN before meals and after use.
  - Keep only in original container
  - Keep container tightly closed
  - Keep in a safe place
  - Keep out of reach of children

The Control of Substances Hazardous to Health Regulations 2002 may apply to the use of this product at work.

### SECTION 16  OTHER INFORMATION

**Key to risk phrases used in section 2.**

- R21- Harmful in contact with skin
- R22- Harmful by inhalation
- R34- Causes Burns
- R50- Very toxic to aquatic organisms

This product is approved for Industrial, professional and amateur use, as a surface biocide and timber preservative as directed on the label.  HSE No: 8984
Further reading (HSE Publications)

L9-The Safe Use of Pesticides for Non-Agricultural Purposes
GS46 – In-Situ Timber Treatments Using Timber Preservatives
L25- Personal Protective Equipment at Work
EH/40- Occupational Exposure limits (revised annually).
The Health and Safety at Work Act 1974
HSG206 – Cost and Effectiveness of Chemical Protective Gloves for the Workplace
HSG71 – The Storage of Packed Dangerous Substances
HSG53 – The Selection, Use and Maintenance of Respiratory Protective Equipment
The Environmental Protection Act 1990
The Collection and Disposal of Waste Regulations

Information on these and other relevant publications may be found by contacting the following:
e-mail: hsebooks@prolog.uk.com or www.hsebooks.co.uk
or write to: HSE Books, P.O. Box 1999, Sudbury, Suffolk CO10 2WA (Tel: 01787-881165) and obtain a free copy of the HSE Books catalogue.
The Health and safety Executive can also keep you regularly updated with new legislation and HSE news by going to: www.hse.gov.uk and following the links to the e-Bulletins.

THE FOLLOWING SECTIONS SHOW CHANGED OR AMENDED INFORMATION:
N/A

INFORMATION ON THIS PRODUCT IS HELD ON THE NPIS TOXBASE DATABASE

COMPILLED BY: P PARTON DATE: REVIEWED OCTOBER 2012

NOTICE TO CUSTOMER:

ENSURE ALL POTENTIAL USERS OF THIS PRODUCT ARE AWARE OF THIS SDS PRIOR TO USING THE PRODUCT.
KEEP SDS IN A SAFE PLACE READILY LOCATABLE IN CASE OF FUTURE REQUIREMENT.
READ THIS SDS IN CONJUNCTION WITH THE LABEL AND DIRECTIONS FOR USE ON THE PRODUCT CONTAINER.
DESTROY ALL OBSOLETE COPIES RELATING TO THIS PRODUCT.
THIS SDS RELATES ONLY TO THE PRODUCT SPECIFIED.
COPIES OF THIS DOCUMENT ARE AVAILABLE ON REQUEST.

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