SAFETY DATA SHEET

SDS No. 008/GHS/15

Conforms to 1907/2006/EC (REACH) Annex II - UK

SECTION 1 IDENTITY OF SUBSTANCE OR PREPARATION & COMPANY

COMPANY/UNDERTAKING: Advanced Chemical Specialties Limited
9, Bofors Park, Artillery Road, Yeovil, Somerset, BA22 8YH UK
☏ (+44) 01935-414012. 🖷 (+44) 01935-414022. info@acslimited.co.uk

PRODUCT NAME: ACS BOROTREAT 10P

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use of substance / preparation:
WATER SOLUBLE WOOD PRESERVATIVE POWDER FOR DILUTION WITH WATER FOR THE TREATMENT OF TIMBER AGINST ATTACK FROM TIMBER DECAY FUNGI AND WOOD DESTROYING INSECTS *LYCTUS BRUNNEUS* AND *ANOBIUM PUNCTATUM*
BPR 2001 UK authorization No UK-2014-0872
FOR PROFESSIONAL USE ONLY. CLASS 2 INTERNAL WOOD PRESERVATIVE (BPR PRODUCT TYPE 8)

1.3 Details of the supplier of the safety data sheet
Advanced Chemical Specialties Ltd
9, Bofors Park, Artillery Road, Yeovil, Somerset, BA22 8YH UK
☏ (+44) 01935-414012. 🖷 (+44) 01935-414022. info@acslimited.co.uk

SECTION 2 HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture
SUBSTANCE
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Repr Cat 1B – H360FD
Signal Word: GHS08 DANGER

2.2 Label elements
Labelling (GHS):

Special identification instructions:
H360FD – May damage fertility or the unborn child

2.3 Other hazards
P201 – Obtain special instructions before use
P202 – Do not handle until all safety precautions have been read and understood
P280 – Wear protective clothing/gloves/eye protection/face protection
P284 – In case of inadequate ventilation wear respiratory protection
P308 + P313 – If exposed or concerned get medical advice/attention
P405 – Store locked up
P501 – Dispose of contents/container in accordance with local/national regulations
Supplementary Statements according to EU Biocides Regulations 528/2012
FOR USE ONLY AS A WOOD PRESERVATIVE
FOR USE BY PROFESSIONAL OPERATORS
Read all precautions before use
The (COSHH) Control of Substances Hazardous to Health Regulations 2002 (as amended) may apply to the use of this product at work.
Attention: Avoid exposure – obtain special instructions before use.
DO NOT CONTAMINATE FOODSTUFFS, EATING UTENSILS OR FOOD CONTACT SURFACES
EXCLUDE ALL UNPROTECTED PERSONS AND ANIMALS DURING TREATMENT AND FOR AT LEAST 1 HOUR POST-TREATMENT
ENSURE THERE IS A PHYSICAL BARRIER TO PREVENT CONTACT BY UNPROTECTED PERSONS AND ANIMALS UNTIL SURFACES ARE COMPLETEL DRY.
ENSURE ADEQUATE VENTILATION before reoccupation.
Guidance on suitable respiratory protective equipment and eye protection is provided in HSE booklet HG (G) 53: “The selection, use and maintenance of Respiratory Protective Equipment – A Practical Guide”
Do not handle until all safety precautions have been read and understood
Wear suitable protective clothing and suitable gloves.
Avoid excessive contamination of coveralls.
After skin contact: Take of immediately all contaminated clothing and wash skin immediately with plenty of soap and water and seek medical attention if symptoms occur. Wash hands and exposed skin before meals and after use.
After eye contact: Rinse immediately with plenty of water. Seek medical attention if symptoms occur.
If Swallowed: Do not induce vomiting unless expressly instructed by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Seek medical attention.
If Inhaled: Move affected person to fresh air. Keep person warm and rested. Provide artificial respiration by trained personnel if breathing is irregular or arrested. Seek medical attention if symptoms are sever or long lasting. If unconscious place in recovery position and seek medical attention immediately.

Keep in a safe place. Keep out of reach of children. Keep locked up
Keep away from food, drink and animal feeding stuffs. When using do not eat or drink
This material and its container must be disposed of in a safe way.
Do not contaminate ground, waterbodies or watercourses with chemicals or used container
Cover all water storage tanks 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 of Wales.
WOOD PRESERVATIVE FOR PROFESSIONAL USE AGAINST WOOD ROTTING FUNGI. FOR USE IN JOINERY AND BUILDING TIMBERS
INSERT RODS INTO PRE-DRILLED HOLES (HOLES TO BE SEALED AFTER TREATMENT) SO THAT 1 – 4KG OF PRODUCT IS APPLIED PER CUBIC METRE OF TIMBER.
THIS PRODUCT IS APPROVED UNDER THE BIOCIDAL PRODUCTS REGULATIONS 2001 FOR USE AS DIRECTED. UK authorization No UK-2014-0872

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

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	CAS No	% in product	H-phrases
DISODIUM OCTABORATE TETRAHYDRATE	12280-03-4	100%	H360FD

3.2 Mixtures
NOT APPLICABLE

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures
General information:
In case of accident or if you feel unwell seek medical advice (show label or SDS where possible).
After inhalation:
Provide fresh air. Keep warm and rested. Seek medical attention if nose or throat irritation are observed.
After contact with the skin:
Wash with plenty of water or water and soap. If irritation occurs, seek medical advice (show label or SDS where possible).
After contact with the eyes:
Remove contact lenses if worn. Rinse immediately with plenty of water whilst lifting the eyelids. Seek medical advice if discomfort or irritation occurs.
After swallowing:
Small quantities should not cause harm to healthy adults. Do not induce vomiting. Rinse mouth with clean water and, if conscious, give water to drink and seek medical attention. Do not administer anything by mouth to an unconscious person.
4.2 Most important symptoms and effects, both acute and delayed
Ingestion of large amounts of powder may cause nausea, vomiting and diarrhoea. Skin redness for repeated over exposure.
4.3 Indication of any immediate medical attention and special treatment needed
Note to physicians: Supportive care only is required for adult ingestion of a few grams of product. If larger amounts have been ingested, maintain fluid and electrolyte balance and maintain adequate kidney function. Gastric lavage is only recommended for heavily exposed symptomatic patients where the stomach has not been emptied. Haemodialysis should be reserved for patients with massive acute adsorption, especially for patients with compromised renal function. Boron analysis is only useful for verifying exposure, not for evaluating the severity of poisoning or as a guide to treatment.

SECTION 5 FIRE FIGHTING MEASURES EAC -

5.1 Extinguishing media
Suitable extinguishing media:
Product is essentially a fire retardant. Use extinguishing media suitable for surrounding fire.
Extinguishing media which must not be used for safety reasons:
None
5.2 Special hazards arising from the substance or mixture
None Known
5.3 Advice for firefighters
Special protective equipment for fire fighting:
Chemical resistant gloves, boots and eye/face protection

SECTION 6 ACCIDENTAL RELEASE / SPILLAGE CONTROL MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wearing personal protection equipment (see section 8), but without taking risks, shut-off the source of the leak or invert containers with the leak uppermost. Avoid contact with eyes and skin. Avoid inhaling dust.. Wash hands and exposed skin before meals and after work. Wear suitable eye protection to EN166 and respiratory protection to EN149 and coveralls when handling powder.
6.2 Environmental precautions
Do not allow product or empty packaging to contaminate groundwater or soil. This product is water soluble and may damage to vegetation in concentration. Contaminated water should not be used for irrigation or abstracted for potable use until boron levels have returned to normal background levels
6.3 Methods and material for containment and cleaning up

Collect spilled product by vacuum sweeping or shovel and sweep-up and place into suitable (steel or HDPE), marked container to await disposal.

Further information:

Further information can be found in section 2.3

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

General information:

Store in cool, dry conditions, out of reach of children and apart from food, drink and animal feedingstuffs. Avoid the accumulation and generation of dusts. Avoid spills. Do not eat drink or smoke when handling product or packaging. Wash hands and exposed skin before meals, after work or when using the toilet. Wash contaminated clothing before re-use

Precautions for safe handling:

Wear suitable gloves and eye/face protection when handling open packages.

Open packs should be re-sealed before being returned to store to avoid the formation of Boric Acid crystals.

Precautions against fire and explosion:

None

7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:

Keep tightly sealed in original container, in cool, dry conditions. Shelf life approximately 24 months in unopened containers.

Advice for storage of incompatible materials:

Keep apart from strong acids and bases.

Further information for storage:

Minimum temperature allowed during storage and transportation: No minimum storage temperature

Maximum temperature allowed during storage and transportation: No maximum storage temperature

7.3 Specific end use(s)

Wood preservative for the control of wood decay fungi and wood destroying insects.

SECTION 8 EXPOSURE CONTROLS/PPE

8.1 Control parameters

Maximum airborne concentrations at the workplace:

UK Workplace Exposure Limit: Boric Oxide – 10mg/m^3 (8-Hour TWA)

8.2 Exposure controls

See below

8.2.1 Exposure in the work place limited and controlled

General protection and hygiene measures:

Wash hands and exposed skin before meals, smoking, using the toilet and after work. Remove contaminated clothing and launder before re-use.

Personal protection equipment:

Wear suitable coveralls and boots

Respiratory protection:

Wear suitable respiratory protection to EN 149 when opening, diluting and spraying diluted product.

Hand protection

Wear suitable gloves (neoprene/pvc, nitrile etc)

Eye protection

Wear CE marked safety glasses to EN166

8.2.2 Exposure to the environment limited and controlled

See section 2.3 for further information

SECTION 9 PHYSICAL / CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General information:

Physical state / form.....: Powder
Colour .....: White
Odour .....: None

Important information about the protection of health, safety and the environment:

Property:	Value:	Method:
Melting point / melting range	>1000 °C	
Boiling point / boiling range	>1300 °C	
Flash point	Not applicable – Fire Retardant	
Sustained combustibility	Not applicable – Fire Retardant	
Ignition temperature	Not applicable – Fire Retardant	
Lower explosion limit (LEL)	Not Applicable	
Upper explosion limit (UEL)	Not Applicable	
Vapour pressure	Not Applicable	
Density	1.87 g/cm^3	
Water solubility / miscibility	Soluble 223g/l @ 20°	
pH-Value	Approx. 7-8	
Viscosity (dynamic)	Not Determined	

9.2 Other information
None

SECTION 10 STABILITY AND REACTIVITY

10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions
If stored and handled in accordance with standard industrial practices no hazardous reactions are known. Relevant information can possibly be found in other parts of this section.
This material will slowly hydrolyse to form boric acid.
10.4 Conditions to avoid
Store apart from strong bases and oxidizing agents

10.5 Incompatible materials
May react with: acids and alkalis and strong oxidizing agents

10.6 Hazardous decomposition products
None Known

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Disodium Octaborate Tetrahydrate has a specific concentration limit of ≥4.6% for toxic for reproduction classification
11.1.1 Acute toxicity
Assessment:
Criteria not met.
Acute toxicity estimate (ATE):

Disodium Octaborate Tetrahydrate	LD50	2550mg/kg	Oral	Rat

11.1.2 Skin corrosion/irritation
Assessment:
Criteria not met

Disodium Octaborate Tetrahydrate	LD50	>2000mg/kg	Dermal	Rabbit

11.1.3 Serious eye damage / eye irritation
Assessment:
Criteria not met. Mild irritation possible (transitory)
11.1.4 Respiratory or skin sensitization
Assessment:
Criteria not met. Product contains no recognized sensitizing agents
11.1.5 Germ cell mutagenicity
Assessment:
Criteria not met. This product has no evidence of mutagenic properties
11.1.6 Carcinogenicity
Assessment:
Criteria not met. This product has no evidence of carcinogenic properties
11.1.7 Reproductive toxicity
Assessment:
Animal ingestion studies of boric acid and sodium tetraborate, at high doses, indicate that they may have developmental and reproductive effects. Human studies of occupational exposure to borate dust currently show no adverse effects on reproduction
Mutagenic Study: NOAEL 17.5mg/kg/day – Oral rat
H360FD - May damage fertility. May damage the unborn child.
11.1.8 Specific target organ toxicity (single exposure)
Assessment:
Not classified as a specific target organ toxicant after a single exposure.
11.1.9 Specific target organ toxicity (repeated exposure)
Assessment:
Not classified as a specific target organ toxicant after a repeated exposure.
11.1.10 Aspiration hazard
No aspiration hazard potential
Assessment:
11.1.11Further toxicological information
Note to physicians: Observation only required for instances of ingestion of less than 4 grams of Boric Oxide. Maintain adequate kidney function and force fluids with ingestion of larger quantities. Haemodialysis should be reserved for massive acute ingestion or patients with renal failure. See section 4.3

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity
Assessment:
According to current knowledge adverse effects on water purification plants are not expected.
21 day NOEC-LOEC levels 6-13mg/l (boron)

Ecotoxicity Data

Component	Test	Result	Period	Target Species
Boric Oxide/Boric Acid (BAeq)	EC_{10}	24mg/l (boron)	96 hour	Green algae
	LC_{10}	150mg/l (boron)	24 day	Rainbow Trout
	LC_{10}	100mg/l (boron)	32 day	Rainbow Trout
	LC_{50}	133mg/l (boron)	48 hour	Daphnia

12.2 Persistence and degradability
Assessment:
The product contains no materials known to be persistent in soil.
12.3 Bioaccumulative potential
Assessment:
Bioaccumulation is not expected to occur
12.4 Mobility in soil
Assessment:
Boron is a naturally occurring element. Disodium Octaborate Tetrahydrate decomposes in the natural environment to Boric acid and subsequently to natural borate.
12.5 Results of PBT and vPvB assessment
Not applicable
12.6 Other adverse effects
None known

SECTION 13 WASTE DISPOSAL

13.1 Waste treatment methods
13.1.1 Material
Recommendation:
Dispose of in accordance with The Environmental Protection Act 1990 or local, regional or national regulations, at a waste treatment site approved and licensed by the local authority and operated by an approved, competent and licensed waste disposal contractor.
13.1.2 Un-cleaned packaging
Recommendation:
Empty, de-contaminated containers may be sent for re-cycling.
Containers may be recycled or re-used. Observe local, regional or national regulations.
13.1.3 Waste Disposal Legislation Ref No. (EC).
Dispose of in accordance with The Environmental Protection Act 1990, at a waste treatment site approved and licensed by the local authority and operated by an approved, competent and licensed waste disposal contractor.
Duty of care waste transfer form should specify: EWC (European Waste Code): Hazardous waste (H10)

SECTION 14 TRANSPORT PRECAUTIONS

14.1 – 14.4 UN number; UN proper shipping name; Transport hazard class(es); Packing group
Road ADR:
Not classified as hazardous for transportation by road
Railway RID:
Not classified as hazardous for transportation by rail
Transport by sea IMDG-Code:
Not classified as hazardous for transportation by sea
Air transport ICAO-TI/IATA-DGR:
Not classified as hazardous for transportation by air
14.5 Environmental hazards
Not an environmental hazard or marine pollutant
14.6 Special precautions for user
See other sections of the data sheet
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Bulk transport in tankers is not intended.

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National and local regulations must be observed.
For information on labelling please refer to section 2 of this document.
Relevant regulations:
SI 2002/1689: CHIP Regulations 2002
SI 2002/2677: COSHH Regulations 2002
SI 1999/3242: Management of Health & Safety at Work Regulations 1999
Health & Safety at Work Act 1974
SI 1993/1643: Environmental Protection Act 1993 & Subsidiary Regulations.
Other national and local measures relating to the workplace, pollution control, environmental protection and waste control.

15.2 Chemical safety assessment
A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has been carried out for this product.

SECTION 16 OTHER INFORMATION

Key to H phrases used in section 2.
H360FD: May damage fertility. May damage the unborn child
Key to P phrases used in section 2 (CLP/GHS)
P201 – Obtain special instructions before use
P202 – Do not handle until all safety precautions have been read and understood
P280 – Wear protective clothing/gloves/eye protection/face protection
P284 – In case of inadequate ventilation wear respiratory protection
P308 + P313 – If exposed or concerned get medical advice/attention
P405 – Store locked up
P501 – Dispose of contents/container in accordance with local/national regulations

Further reading:
L9 – The Safe Use of Pesticides for Non-Agricultural Purposes
L25 – Personal Protective Equipment at Work
GS46 – In-situ Timber Treatment Using Timber Preservatives
EH/40 – Occupational Exposure Limits (revised annually)
The Health & Safety at Work Act 1974
HSG206 – Cost 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
L5 – The Control of Substances Hazardous to Health Regulations 2003 Approved Code of Practice

Information on these and other relevant publications may be found by contacting the following:
E-mail: hsebooks@prologue.uk.com or www.hsebooks.co.uk
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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:
Revised from first issue. All sections show changes

COMPILED BY: P Parton **DATE:** March 2015

NOTICE TO CUSTOMER:

ENSURE ALL POTENTIAL USERS OF THIS PRODUCT ARE AWARE OF THIS SDS PRIOR TO PRODUCT'S USE.
KEEP SDS IN A SAFE PLACE READILY LOCATABLE IN CASE OF FUTURE USE.
READ THIS SDS IN CONJUNCTION WITH ANY 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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