

| | |
|------------------|---|
| 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 BORON ROD

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of substance / preparation:
FUSED BORIC OXIDE, WATER SOLUBLE WOOD PRESERVATIVE GLASS ROD FOR THE TREATMENT OF TIMBER AGAINST ATTACK FROM DECAY FUNGI
BPR 2001 UK authorisation No UK-2013-0796
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

MIXTURE
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 handle until all safety precautions have been read and understood

Wear suitable protective clothing and suitable gloves.

Avoid excessive contamination of coveralls.

After contact with skin, wash immediately with plenty of water and seek medical advice immediately. Wash hands and exposed skin before meals and after use.

Keep in a safe place. Keep out of reach of children. Keep locked up

In case of accident, or if you feel unwell, seek medical advice immediately (show the label where possible). If exposed or concerned, get medical attention.

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. Dispose of contents/container at a hazardous waste disposal site.

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-2013-0796

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

NOT APPLICABLE

3.2 Mixtures

BORIC OXIDE 87.4% w/w – CAS No 1303-86-2

DISODIUM TETRABORATE 9.81% w/w – CAS No 1330-43-4

| | |
|------------------|---------------------------|
| 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:

Under normal conditions of handling and use this is not considered a route of exposure. Provide fresh air. Keep warm and rested.

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:

Do not induce vomiting. Rinse mouth with clean water and seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Due to the glass-like nature of the product, be aware of abrasion to eyes, mouth, gastric tract and skin. Further relevant information can be found in other parts of this section.

4.3 Indication of any immediate medical attention and special treatment needed

Further toxicology information in section 11 must be observed.

| | | |
|------------------|-------------------------------|--------------|
| SECTION 5 | FIRE FIGHTING MEASURES | EAC - |
|------------------|-------------------------------|--------------|

5.1 Extinguishing media**Suitable extinguishing media:**

Product is essentially non-combustible. 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

Use suitable CE marked gloves (Neoprene/PVC, nitrile or similar), eye/face protection and coveralls. Wash hands and exposed skin before meals and after work. When using, do not eat, drink or smoke

6.2 Environmental precautions

Do not allow product or empty packaging to contaminate groundwater or soil.

6.3 Methods and material for containment and cleaning up

Collect spilled product 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.

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

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.

| | |
|------------------|------------------------------|
| SECTION 8 | EXPOSURE CONTROLS/PPE |
|------------------|------------------------------|

8.1 Control parameters

Maximum airborne concentrations at the workplace:

UK Workplace Exposure Limit: Boric Oxide – 10mg/m³ (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:

No specific requirement for respiratory protection as the product is not considered an inhalation hazard.

Hand protection

Wear suitable gloves (neoprene/pvc, nitrile etc)

Eye protection

Wear CE marked safety glasses

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.....: Solid
 Colour: Clear/opaque
 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 | |
| Sustained combustibility..... | Not applicable | |
| Ignition temperature | Not applicable | |
| Lower explosion limit (LEL) | no data available | |
| Upper explosion limit (UEL)..... | no data available | |
| Vapour pressure..... | no data available | |
| Density | 2.10 g/cm ³ | |
| Water solubility / miscibility..... | Soluble over prolonged period | |
| 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.

10.4 Conditions to avoid

None known.

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

11.1.1 Acute toxicity

Assessment:

No data on acute inhalation toxicity is available for this product.

Acute toxicity estimate (ATE):

| | | | | |
|-------------|------|------------|--------|--------|
| Boric Oxide | LD50 | 2600mg/kg | Oral | Rat |
| | LD50 | >2000mg/kg | Dermal | Rabbit |

11.1.2 Skin corrosion/irritation

Assessment:

For this endpoint no toxicological test data is available for the whole product. Product contains no recognized skin irritants

11.1.3 Serious eye damage / eye irritation

Assessment:

For this endpoint no toxicological test data is available for the whole product. Mild irritation possible (transitory). Possible corneal abrasion from broken glass

11.1.4 Respiratory or skin sensitization

Assessment:

For this endpoint no toxicological test data is available for the whole product. Product contains no recognized sensitizing agents

11.1.5 Germ cell mutagenicity

Assessment:

This product has no evidence of mutagenic properties

11.1.6 Carcinogenicity

Assessment:

This product has no evidence of mutagenic 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

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

Not relevant due to the form of the product

Assessment:

11.1.11 Further 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.

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 | 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. Boric oxide decomposes in the natural environment 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, state 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/state/federal 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): 03 02 05

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 the components of this product.

SECTION 16**OTHER INFORMATION****Key to risk phrases used in section 2.**

H360FD: May damage fertility. May damage the unborn child

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

Alternatively, most Approved Codes of practice are now available to download for free: visit www.hse.gov.uk or www.businesslink.gov.uk and click on 'Workplace Health and safety'

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:

Revised from first issue. All sections show changes

COMPILED BY: P Parton

DATE: January 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.**

THIS SAFETY DATA SHEET IS BASED ON THE BEST OF CURRENT INFORMATION AND ADVICE AVAILABLE TO US AND IS BELIEVED TO BE TRUE AND ACCURATE. NO LIABILITY CAN BE ACCEPTED FOR ANY LOSS, DAMAGE OR INJURY AS CONDITIONS OF USE ARE OUTSIDE OUR CONTROL. THIS IS NOT A TECHNICAL SPECIFICATION.