

SAFETY DATA SHEET

SDS No. 004/GHS/15

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

SECTION 1**IDENTITY OF SUBSTANCE OR PREPARATION & COMPANY**

COMPANY/UNDERTAKING: Property Repair Systems, Unit 3, Olympus Business Park, Newton Abbot, Devon. Tel: 01626 331351 Fax: 01626 331143
E Mail: help@propertyrepairsystems.co.uk

PRODUCT NAME: BORON ULTRA 12 POWDER

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 AGAINST 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

Property Repair Systems, Unit 3, Olympus Business Park, Newton Abbot, Devon. Tel: 01626 331351 Fax: 01626 331143 E Mail: help@propertyrepairsystems.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 COMPLETELY 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 off 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 severe 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/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:

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 $\geq 4.6\%$ 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:**11.1.11 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. 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

		5		
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

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: 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.

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.