

Summary of product characteristics for a biocidal product

Product name: Jerbor

Product type(s): PT08 - Wood preservatives (Preservatives)

Authorisation number: 5689

R4BP 3 asset reference number: SE-0008053-0000

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Administrative information

1.1. Trade names of the product

Jerbor

1.2. Authorisation holder

Name and address of the authorisation holder	Name	Jerbol System AB
	Address	Arenavägen 7 SE-121 88 Stockholm-Globen Sweden
Authorisation number	5689	
R4BP 3 asset reference number	SE-0008053-0000	
Date of the authorisation	01/09/2013	
Expiry date of the authorisation	05/03/2028	

1.3. Manufacturer(s) of the biocidal products

Name of the manufacturer	Jerbol System AB
Address of the manufacturer	c/o WSP Sverige AB, Box 13033, 402 51 Göteborg Sweden 402 51 Göteborg Sweden
Location of manufacturing sites	c/o WSP, Spadegatan 6, 424 65 424 65 Angered Sweden

1.4. Manufacturer(s) of the active substance(s)

Active substance	9 - Boric acid
Name of the manufacturer	Rio Tinto Iron & Titanium GmbH
Address of the manufacturer	Mergenthalerallee 77 65760 Eschborn Germany
Location of manufacturing sites	US Borax Inc., 14486 Borax Road CA 93516 Boron United States

Active substance	9 - Boric acid
Name of the manufacturer	Etimine S.A.
Address of the manufacturer	Immeuble 67 204, Z.I. Scheleck 2 L-3225 Bettembourg Luxembourg
Location of manufacturing sites	Eti maden isletmeleri g.m., Emet kolemanit Islt. Müdürlüğü 43700 Emet/Kütahya Turkey

Active substance	29 - Disodium tetraborate pentahydrate
Name of the manufacturer	Rio Tinto Iron & Titanium GmbH
Address of the manufacturer	Mergenthalerallee 77 65760 Eschborn Germany
Location of manufacturing sites	US Borax Inc., 14486 Borax Road CA 93516 Boron United States

Active substance	29 - Disodium tetraborate pentahydrate
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2. Product composition and formulation

2.1. Qualitative and quantitative information on the composition of the biocidal product

Common name	IUPAC name	Function	CAS number	EC number	Content (%)
Boric acid	boric acid	Active Substance	10043-35-3	233-139-2	53,7
Disodium tetraborate pentahydrate	Disodium tetraborate pentahydrate	Active Substance	12179-04-3	215-540-4	46,3

2.2. Type of formulation

SG - Water soluble granule

3. Hazard and precautionary statements

Hazard statements

Causes serious eye irritation.
May damage fertility. May damage the unborn child.

Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves / protective clothing/ eye protection /face protection.
Wash hands or other body parts that have come into contact with the product thoroughly after handling.
IF IN EYES:Rinse cautiously with water for several minutes.Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned:Get medical attention.
If eye irritation persists:Get medical attention.
Store locked up.
Avoid release to the environment.
Collect spillage.
Dispose of container to in accordance with national legislation..
Dispose of contents to in accordance with national legislation.

4. Authorised use(s)

4.1 Use description

Use 1 - Use # 1 – Preservation of wooden foundations (curative treatment)

Product type	PT08 - Wood preservatives (Preservatives)
Where relevant, an exact description of the authorised use	-
Target organism(s) (including development stage)	Scientific name: Basidiomycetes: Common name: Brown rot fungi Development stage: Scientific name: Basidiomycetes: Common name: White rot fungi Development stage: Scientific name: Fungi: Common name: Soft rot fungi Development stage:
Field(s) of use	Other E.40 Wood preservative, use class 4a, remedial application of timbers in service in ground contact (curative).
Application method(s)	Method: Open system: injection Detailed description: F.20, Injection (Eurobor slurry is injected to a depot outside the wood). F.60, Diffusion (diffusion of active substances from injected depot into the wet wood).
Application rate(s) and frequencies	Application Rate: Concentration of AS in solution/slurry before application is 9.0% BAE w/w (about 10.6% BAE w/v). Estimated/applied dose of Jerbor equal to 5-12 kg BAE/m ³ Target dose of Jerbor equal to 2 kg BAE/m ³ Target retention of active substances in wood after 5 years, above 1 kg BAE/m ³ One application for each foundation Dilution (%): 9.6 % w/w Jerbor, 70.4% w/w water and 20% w/w sodium bentonite in the injection mixture. Number and timing of application: One application for each foundation.
Category(ies) of users	Professional
Pack sizes and packaging material	HDPE Barrel 30 L

4.1.1 Use-specific instructions for use

See General directions for use.

4.1.2 Use-specific risk mitigation measures

See General directions for use.

4.1.3 Where specific to the use, the particulars of likely direct or indirect effects, first aid instructions and emergency measures to protect the environment

See General directions for use.

4.1.4 Where specific to the use, the instructions for safe disposal of the product and its packaging

See General directions for use.

4.1.5 Where specific to the use, the conditions of storage and shelf-life of the product under normal conditions of storage

See General directions for use.

5. General directions for use

5.1. Instructions for use

The instructions for use of Jerbor are available in Manual Euroborbehandling (2022). The use is restricted only to professional staff trained according to the manual.

Overall use activities

The following activities are mandatory:

1. Foundation investigation
2. Preparations before treatment
3. Treatment with measurements
4. Follow-up of result

Required results from the overall use activities

1. Before a recommendation of a treatment with Jerbor, a foundation investigation have to result in following:

laboratory results, showing fungi degradation in grillage or piles and that wood is still worth preserving
documented foundation design from inspection of pits
wood and groundwater levels
control of sewage pipes beneath the building
documented ground conditions, showing that the foundation is surrounded by dense clay with low water turnover in the decay/treatment zone
measurements showing uniform settling pace within the building
knowledge of the hydrogeological conditions in the surroundings

2. Before a treatment with Jerbor, preparations have to result in following:

necessary control documents to ensure,
that intended effect of the treatment is achieved
that the work can be performed safely, both for professionals and for third parties
that work can be done without environmental impact outside the treatment zone
all professionals and third parties are properly informed
injection holes are marked out with each holes identity on site according to drilling drawing
any leaking sewage pipes beneath the building are repaired and any wastewater contaminated groundwater is pumped out
installed ground water tubes outside the foundation for environmental control
sampled and analysed ground water, showing background levels of boron substances before treatment
if necessary, sealing measures are performed

3. Treatment with measurements, have to result in following:

appropriate health and safety on site
required work documents available on site
responsible management present at site
protocol of drilled injection holes
indoor set up of mixing station with preparations to handle any spill
protocol of injected amount Eurobor slurry with measurements of water level, electric conductivity and pH value before and during injection. The protocol should include injection scheme, noted spread and comments.
protocol and lab results of environmental controls
sealed and restored injection holes and cleaned premises
final report of the work including protocols, lab results, updated drilling drawing and instructions to the client

4. Follow-up of results must generate:

settling pace within the building, monitored with subsidence levelling active substance in wood (after 5 years), a routine sampling of wood and analysing of boric acid equivalent (BAE) is always made after five years before the commercial warranty expires. In some cases, wood sampling is also done as a control in the beginning of the warranty time.
In most cases the property owner/customer (on recommendation) wants continued monitoring of settling pace, groundwater levels and sampling etc. after end of warranty. It is often 7 to 10 years from a first foundation investigation of a building to the end of the warranty time.
usually a Eurobor treatment is made once. In some cases, additional treatments might be needed. The protocol in these cases is, that extended wood sampling and analyses of borates are performed, and then a limited area is chosen for additional treatment.

Instructions to prepare Eurobor slurry

The Eurobor slurry is prepared from Jerbor (9.6 % w/w), hot water (70.4 % w/w) and sodium bentonite (20 % w/w).

151 L of hot water (50-70°C) is filled in mixing tank and circulation pump is started.

20.6 kg of Jerbor is portioned in mixing tank under carefully stirring.

18 L of the Jerbor water solution is filled (through a connected hose with a ball valve) in to the mixing vessel and 4.8 kg of sodium bentonite is portioned during mixing with the plaster and mortar mixer.

Mixing is done until all bentonite is in the mixing vessel and then mixing will stop for a minute and the mixing starts again until the slurry is smooth and the viscosity is correct.

The 20 L of slurry is poured by tilting the mixing vessel into the plaster and mortar pump and is ready for injection.

Instructions for safe handling

Only professionals trained according to Manual Euroborbehandling (manual of Eurobor technique) are allowed to handle the product.

The product must be stored in a locked space at working site

Only personnel have access to the working site and the product

Wear protective gloves/protective clothing/eye protection/face protection
Use respiratory protection when handling dry product
Keep away from food, drink, drinking water and animal feed
Limit handling that generates dust and provide for good ventilation
Pregnant or lactating women should not work with the product
Running tap water should always be available at working site
Eyewash should always be available at mixing place
Immediately remove spill of the product according to guidelines
Immediately remove bentonite spill from floor, slippery when wet
Keep order and tidy in the workplace
If there is a risk of spillage, floor wells should be covered and sewer pipes below the floor should be intact.

5.2. Risk mitigation measures

The following risk mitigating measures should be applied during the different steps when handling the product:

Production:

The packages with the active substances should be opened under a ventilated hood (LEV).
Use of respiratory protective equipment (RPE) with particle filter P3 is mandatory (filter type (code letter, colour) to be specified by the authorisation holder within the product information).
Wear a protective coverall [type 6, EN 13034].

Wear protective chemical resistant gloves during production (glove material to be specified by the authorisation holder within the product information).

The use of eye protection during production of Jerbor is mandatory.

Mixing/loading:

Use of respiratory protective equipment (RPE) with particle filter P3 is mandatory (filter type (code letter, colour) to be specified by the authorisation holder within the product information).
Wear a protective coverall [type 6, EN 13034].

Wear protective chemical resistant gloves during mixing/loading of the product (glove material to be specified by the authorisation holder within the product information).

The use of eye protection during mixing/loading is mandatory.

Application:

Application must be done via a closed system.

Wear a protective coverall [type 6, EN 13034].

Wear protective chemical resistant gloves during application of the product (glove material to be specified by the authorisation holder within the product information).

Cleaning:

Wear a protective coverall [type 6, EN 13034].

Wear protective chemical resistant gloves during cleaning of the equipment (glove material to be specified by the authorisation holder within the product information).

The use of eye protection during cleaning of the equipment is mandatory.

Maintenance/repair:

Wear a protective coverall [type 6, EN 13034].

Wear protective chemical resistant gloves during cleaning of the equipment (glove material to be specified by the authorisation holder within the product information).

The use of eye protection during cleaning of the equipment is mandatory.

Environment:

Treatment zone must be surrounded by dense clay of marine origin with low water turnover of at least 2 m deep
Installation of groundwater tubes for environmental control must always be done before the treatment.
All low-lying openings of drain shafts must be sealed before treatment.

5.3. Particulars of likely direct or indirect effects, first aid instructions and emergency measures to protect the environment

Particulars of likely direct or indirect effects

Inhalation; may cause respiratory irritation
Skin contact; may cause skin irritation
Eye contact; irritating to eyes
Ingestion; may cause nausea, vomiting, diarrhoea

First aid instructions

IF EXPOSED OR CONCERNED: Get medical advice/attention.
IF INHALED: If symptoms occur call a POISON CENTRE or a doctor.
IF ON SKIN: Wash skin with water. If symptoms occur call a POISON CENTRE or a doctor.
IF IN EYES: Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing for 5 minutes. Call a POISON CENTRE or a doctor.
IF SWALLOWED: Rinse mouth. Give something to drink, if exposed person is able to swallow. Do NOT induce vomiting. Call a POISON CENTRE or a doctor.

Emergency measures to protect the environment

In case of dry product spills, sweep/shovel up/clean with an industrial vacuum cleaner large spills and place in a labelled sealable container. Rinse area thoroughly with water.
In case of slurry spills, pick up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material). Keep in suitable closed containers for disposal.
Dispose of absorbed material and the cleaning water in accordance with regulations as hazardous waste.
In case of major accidental emissions, immediately inform the local authorities and limit the damage as much as possible.
Decontamination equipment and activated carbon filter must always be available at site.
Recycle spilled chemicals if possible in the next batch. Otherwise dispose of as hazardous waste.

5.4. Instructions for safe disposal of the product and its packaging

Dosage and use of the product are performed according to Manual Euroborbehandling (manual of Eurobor technique) to minimize residues.

Residues and spills are collected to be reused if possible, otherwise disposed of as hazardous waste.

Empty packaging is considered as hazardous waste and should be disposed of in accordance with local regulations. Cleaned packaging can be recycled or reused. Reuse of empty packaging is only allowed for refilling of the Jerbor product. Rinse the packaging three times with water and let it dry. If possible, use the rinsing water in the production of the next batch. Otherwise, the cleaning water shall be disposed of as hazardous waste.

Product residues and contaminated material are hazardous waste and should be disposed of in accordance with local/regional/national/international regulations.

Waste and residues

EWC Code: 06 13 01* - Inorganic plant protection products, wood-preserving agents and other biocides

Uncleaned packaging

EWC Code: 15 01 10* - Packaging containing residues of or contaminated as dangerous substance.

5.5. Conditions of storage and shelf-life of the product under normal conditions of storage

Shelf life: 10 weeks.

Do not store above 25°C

Store in original container in a dry, cool, and well-ventilated place.

Keep container tightly closed.

6. Other information

Procedures for cleaning application equipment

Clean the application equipment in water. Collect the water in a barrel. If possible, use this water in the production of the next batch.
Wear protective clothing, safety goggles and protective gloves in nitrile rubber during the cleaning.