

---

## MATERIAL SAFETY DATA SHEET

### GlyBor 300

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** GlyBor 300  
**Product type:** Glycol-based borate wood preserving solution  
**Supplier:** Timberlife (Pty) Ltd  
P.O. Box 73117, Lynnwood Ridge 0040, South Africa  
Tel.: + 27-12-803-8595  
Fax: + 27-12-803-8462  
E-mail: [info@timberlife.co.za](mailto:info@timberlife.co.za)  
Website: [www.timberlife.co.za](http://www.timberlife.co.za)

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

**GlyBor 300** is a penetrating fungicidal and insecticidal surface and internal treatment for preserving new and existing timbers.

**Chemical nature and use:** A ready-for-use, glycol-based wood preserving solution that is formulated as a surface and internal treatment for preserving untreated and difficult to treat timbers, whether new or existing, e.g. joinery, roof and floor timbers, pole structures, etc. It can also be used as a remedial treatment for timbers that suffer from insect and fungal infestation. **GlyBor 300** contains borate wood preserving active ingredients that provide protection against fungal decay as well as wood boring insects and termites. The formulation ensures minimal evaporation whilst allowing for maximum penetration of the active borate component into all types of uncoated timber, even at low wood moisture contents. **GlyBor 300** provides a colourless, odourless and non-flammable treatment of wide spectrum fungicidal and insecticidal activity with the exceptional advantage of having a low mammalian toxicity. It is easy to apply and can be over-coated with any wood sealer/coating after drying.

**Active ingredient content  
(expressed as Boric acid  
equivalent):**

Boric acid ( $H_3BO_3$ ) ..... 300 g/l

# GlyBor 300

## 3. HAZARD IDENTIFICATION

In terms of the South African Department of Agriculture, Forestry and Fisheries, Act No. 36 of 1947, borate-based wood preservatives are classified as Toxicity Group IV products, i.e. "Acute hazard unlikely in normal use".

### Most important hazards:

- Human health effects
  - Harmful if swallowed
  - May irritate damaged skin
  - Not a skin sensitizer
  - Moderately irritating to eyes
  - May irritate nose, throat and lungs if vapours are inhaled.
  
- Environmental effects
  - Moderately toxic to both plant and aquatic life
  
- Physical hazards
  - None
  - (Non-flammable and non-explosive during storage and use).

## 4. FIRST-AID MEASURES

### Ingestion:

First wash out mouth with water and then give large amounts of water to dilute the substance. **Do not** induce vomiting. If vomiting occurs, keep head below hips to prevent the patient from swallowing it or choking on it. Obtain medical attention.

### Skin contact:

Wash away with plenty of water.

### Eye contact:

Immediately flush out with plenty of clean water for at least 5 minutes, occasionally lifting upper and lower eye lids.

### Inhalation:

Remove the patient to fresh air. If respiratory distress is detected, seek medical attention immediately.

# GlyBor 300

## 5. FIRE-FIGHTING MEASURES

No special precautions are necessary.

Any fire extinguisher may be used on nearby fires.

(Inorganic borates are non-flammable and non-explosive).

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions:

Avoid inhalation of vapours during spray application and contact with eyes and damaged skin.

### Environmental precautions:

Avoid contamination of rivers, dams or canals.  
Prevent spillage from entering drains and ditches.

### Methods for cleaning up:

For liquid spills, block drains and contain with sandbags, etc. Bail out any pools of solution into clean, dry containers and remove from spill area for re-use if not contaminated.

## 7. HANDLING AND STORAGE

### Handling:

No special handling precautions are required

In case of contact with the skin and eyes, immediately wash with water.

Do not eat, drink or smoke while using the product.

Do not discharge into rivers, dams and canals.

### Storage:

Store in a cool, dry place away from food and foodstuffs.  
No further special precautions are necessary.

# GlyBor 300

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering controls:

No special precautions are necessary.

### Personal protective equipment:

When spraying the product, an appropriate respirator should be worn.

The use of protective clothing such as overalls, rubber gloves and safety goggles during handling and use of the product is recommended.

### Hygiene measures:

Wash hands before eating drinking or smoking.

Wash overalls and clothes regularly.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	:	Slightly viscous liquid
<b>Colour</b>	:	Virtually colourless, transparent
<b>Odour</b>	:	Slightly sweetish
<b>pH</b>	:	4.85
<b>Temperature stability</b>	:	Completely stable at temperatures of up to 90°C (May become less viscous)
<b>Flash point</b>	:	Over 115°C
<b>Flammability</b>	:	Non-flammable
<b>Decomposition temperature</b>	:	Above 120°C (active ingredients)
<b>Auto ignition temperature</b>	:	None
<b>Explosion properties</b>	:	None
<b>Density</b>	:	1.21 kg/ℓ
<b>Solubility</b>	:	Completely soluble in water
<b>Water-insoluble matter</b>	:	Less than 5 g/kg

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	:	Stable for at least 2 years if kept in unopened containers stored at temperatures of below 45°C
<b>Conditions to avoid</b>	:	High temperatures
<b>Materials to avoid</b>	:	Strong oxidising agents and reducing agents such as metal hydrides and alkali metals.
<b>Hazardous decomposition products</b>	:	Carbon monoxide, carbon dioxide and other organic compounds

# GlyBor 300

## 11. TOXICOLOGICAL INFORMATION

- Acute toxicity** (calculated) :
  - Acute Oral LD<sub>50</sub> (rat) - Over 11 667 mg/ℓ
  - Acute Dermal LD<sub>50</sub> (rabbit) - Over 6 667 mg/ℓ
  - Inhalation LC<sub>50</sub> (rat) - Over 6.7 mg/ℓ
- Local effects** : See Section 3, "Human health effects"  
**GlyBor 300** is not a skin sensitizer
- Chronic toxicity** : No evidence of carcinogenic or mutagenic effects  
Reproductive and developmental toxicity was only noted in cases where laboratory animals were fed large doses of borates over prolonged periods

## 12. ECOLOGICAL INFORMATION

- Environmental effects** : See Section 3, "Environmental effects"
- Mobility** : Inorganic borates are water soluble and will be dispersed in soil, the rate of which will depend on the soil type, the soil moisture content and the amount and concentration of the spill.
- Degradability** : Decomposes in the environment to natural borate.
- Bioaccumulation** : Inorganic borates are absorbed by plants and are used as a micronutrient for healthy growth. However, large quantities can be phytotoxic.
- Ecotoxicity** : Moderately toxic to both plant and aquatic life. (For rainbow trout, the 24-day LC<sub>50</sub> =150 mg B/ℓ).

## 13. DISPOSAL CONSIDERATIONS

- Product waste** : Dispose of in accordance with prevailing disposal regulations, preferably by a competent waste disposal company. Avoid contamination of soil and water by waste product. Whenever possible, any waste product should be recovered and re-used.
- Treated timber waste** : Dispose of in an approved landfill. Burning may be carried out in non-residential areas and ash disposed of in an approved landfill.
- Packaging material** : Dispose of at an approved waste disposal facility.

# GlyBor 300

## 14. TRANSPORT INFORMATION

Borates are classified as non-hazardous substances and no special precautionary transport measures are necessary.

(The European Communities' Directive on the Classification, Packaging and Labelling of Dangerous Substances classifies substances with a median lethal dose (acute oral toxicity in the rat, LD<sub>50</sub>) of greater than 2000 mg/kg bodyweight, as not dangerous).

UN Number	: N/A
Hazchem Code	: 1 [T]
EAC	: 0
IMDG Code	: N/A
IMDG Packaging Code	: N/A
Marine Pollutant	: No
Class	: N/A
Subsidiary Risks	: N/A
Tremcard Number	: N/A

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the Substance

It should be noted that borates are safe under conditions of normal handling and use, besides, they are essential nutrients to plants, and research shows that they play a beneficial role in human health. CLP classification has been solely based on animal tests where animals were exposed to high doses of boric acid over long periods of time. These doses were many times higher than humans are exposed to under conditions of normal handling and use.

#### **Clean Air Act (Montreal Protocol)**

Boric acid and borax pentahydrate were not manufactured with and does not contain any Class I or Class II ozone depleting substances.

#### **Chemical inventory listing**

##### **Boric acid:**

- U.S. EPA TSCA Inventory 10043-35-3
- Canadian DSL 10043-35-3
- EINECS 233-139-2
- South Korea 1-439
- Japanese MITI (1)-63

##### **Borax pentahydrate:**

- U.S. EPA TSCA Inventory 1330-43-4
- Canadian DSL 1330-43-4
- EINECS 215-540-4
- South Korea 1-760
- Japanese MITI (1)-69

# GlyBor 300

## EU Reach Regulation

Borates are listed in the Candidate List of Substances of Very High Concern "SVHC" for eventual inclusion in Annex XIV to REACH Regulation 1907/2006 ("Authorisation List"). (18.06.2010-ED/30/2010).

Borates are listed in the Annex XVII of REACH Regulation 1907/2006 (EU No.109/2012) and its use in consumer products above specific concentration limits is restricted. Note that this restriction is only specific to consumer products and do not cover its industrial and/or professional applications. Boric acid can be used in consumer products below specific concentration limits (which is  $C \geq 5.5\%$  for Boric acid and  $C \geq 6.5\%$  for Borax pentahydrate).

### 15.2 Chemical safety assessment

Chemical Safety Assessment of Boric acid and Borax pentahydrate have been carried out under REACH Regulations of the EU.

EEC Hazard Classification : N/A

### 15.3 Compliance with the following national/local regulations must be adhered to:

- National Water Act, No. 36 of 1998.
- National Health Act, No. 61 of 2003.
- Environmental Conservation Act, No. 73 of 1989.
- Hazardous Substances Act, No. 15 of 1973.
- Occupational Health and Safety Act, No. 181 of 1993.
- Provincial Ordinances and Local Authority Bylaws.

## 16. OTHER INFORMATION

Please consult the product label before use.

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product.

**Compiled:** January 2017