



# Tim-bor® Industrial

Wood protection



Disodium octaborate tetrahydrate

CAS Number 12008-41-2

### Attributes and uses

*Tim-bor*® Industrial high performance borate wood preservative has been specially designed to give a product with the highest concentration of boron at the maximum possible solubility and rate of dissolution in water.

Wood treated with *Tim-bor* Industrial can be used for a variety of purposes. Typical applications include trussed rafters, studding, cladding, and exterior joinery. Wood treated with *Tim-bor* Industrial is not suitable for ground contact applications and should be protected with a water repellent coating when used in exterior applications (eg joinery, fascia).

*Tim-bor* Industrial combines a broad spectrum of efficacy and low acute mammalian toxicity. *Tim-bor* Industrial has proven efficacy against wood decay fungi, wood boring beetles and termites. *Tim-bor* Industrial does not contain any organic or heavy metal components and, as it is applied as an aqueous solution, does not use organic solvents.

*Tim-bor* Industrial has been used in the United States, South East Asia, Australia and New Zealand for many years and has a well known and proven performance. This has been demonstrated by independent laboratory and field studies carried out by universities and government testing facilities around the world.

*Tim-bor* Industrial is flexible with regard to application methodology. *Tim-bor* Industrial can be applied as a pre-treatment by vacuum-pressure processes to dry or green timber, and by dip diffusion to green timber. The ability to treat green timber successfully and the subsequent diffusion of borates in wood enables penetration of species known to be difficult to treat, such as Douglas fir, Spruce and many hardwoods.

The use of *Tim-bor* Industrial varies according to working requirements and country/market specific product labels. Prior to treatment with *Tim-bor* Industrial, Rio Tinto literature or appropriate national standards must be consulted. Wood treated with *Tim-bor* Industrial retains its natural appearance and its strength. Treating wood with *Tim-bor* Industrial has little or no effect on ferrous metals, plastics, rubber, putties, bituminous solutions, other sealants, or on primer paints.

# Tim-bor® Industrial

Solubility in water	
Temperature °C	Tim-bor Industrial % by weight in saturated solution
0	2.5
10	4.5
20	9.7
30	21.9
40	27.4
50	34.3
60	40.7

Solubilities at the temperatures to the left are under equilibrium conditions. *Tim-bor* Industrial readily dissolves in cool water to give supersaturated solutions with higher concentrations than indicated in the table. Precipitation of sodium pentaborate may occur if a super saturated solution is cooled further.

pH	
Tim-bor Industrial % by weight in saturated solution	pH @ 23°C (73°F)
1	8.5
2	8.4
5	8.0
10	7.6
15	7.3

Aqueous solutions of *Tim-bor* Industrial range from mildly alkaline at low concentrations to approximately neutral at higher concentrations.

## Warnings

Avoid prolonged inhalation or prolonged skin contact. Not for food or drug use. Read all instructions relating to the products before use.

**Notice:** Before using these products, please read the Product Specifications, the Safety Data Sheets and any other applicable product literature. The descriptions of potential uses for these products are provided only by way of example. The products are not intended or recommended for any unlawful or prohibited use including, without limitation, any use that would constitute infringement of any applicable patents. Nor is it intended or recommended that the products be used for any described purposes without verification by the user of the products' safety and efficacy for such purposes, as well as ensuring compliance with all applicable laws, regulations and registration requirements. Suggestions for use of these products are based on data believed to be reliable. The seller shall have no liability resulting from misuse of the products and provides no guarantee, whether expressed or implied, as to the results obtained if the products are not used in accordance with directions or safe practices. The buyer assumes all responsibility, including any injury or damage, resulting from misuse of the product, whether used alone or in combination with other materials. THE SELLER MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE SELLER SHALL HAVE NO LIABILITY FOR CONSEQUENTIAL DAMAGES.