



# Tim-bor<sup>®</sup> Industrial

## Wood Protection

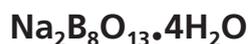
Product Profile





# Tim-bor<sup>®</sup> 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 (e.g. 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 and Australasia 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 hard woods.

The use of *Tim-bor* Industrial varies according to working requirements and country/market specific product labels. Prior to treatment with *Tim-bor* Industrial, Borax 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.

### Chemical Composition (Typical)

Sodium oxide (Na <sub>2</sub> O) . . . . .	14.7%
Boric oxide (B <sub>2</sub> O <sub>3</sub> ) . . . . .	67.1%
Water (H <sub>2</sub> O by difference) . . . . .	18.2%
Equiv. disodium octaborate tetrahydrate . . . . .	98%

## Chemical and Physical Properties

### Solubility in water

Temperature °C	<i>Tim-bor</i> 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 above temperatures 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 may occur if a supersaturated solution is cooled further.

### pH

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

<i>Tim-bor</i> Industrial % by weight in saturated solutions	pH @ 23°C
1	8.5
2	8.4
5	8.0
10	7.6
15	7.3

## 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 this product, please read the label, Product Specification, the Material Safety Data Sheet and any other applicable product literature.

The descriptions of potential uses for this product are provided only by way of example. The product is 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 product be used for any described purposes without verification by the user of the product's safety and efficacy for such purposes, as well as ensuring compliance with all applicable laws, regulations and registration requirements.

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