

# Technical datasheet.

## 1. Product information

Product Name: Superwood®  
Treatment Method: Supercritical impregnation  
Impregnation Agent: PT08-approved wood preservative  
Wood Species: Nordic Spruce (Picea Abies)  
Harmonised Standard: EN 14915:2013

## 2. Product Description

Superwood consists of through-impregnated spruce boards without heavy metals. Supercritical impregnation uses carbon dioxide (CO<sub>2</sub>) to dissolve and transport organic fungicides (wood preservatives). The impregnation agent is colourless and environmentally approved. The treatment does not alter the physical properties of the wood.

## 3. Process Description

The impregnation is carried out in a closed process-technical plant operating in a circular system. The wood is placed in the impregnation vessel and the impregnation agent is added.

When CO<sub>2</sub> is added to the vessel, the pressure increases, and once it exceeds 74 bar and the temperature rises to 31°C, the CO<sub>2</sub> reaches the so-called supercritical state, where it acts as a carrier for the impregnation agents.

The impregnation agents then migrate with the CO<sub>2</sub> into the wood.

The pressure in the vessel is reduced to atmospheric pressure by releasing the CO<sub>2</sub> from the wood and the vessel. The impregnation agents remain inside the wood.

Superwood has received the EU Environmental Award for Cleaner Technology.

#### 4. Technical specifications

<u>Property:</u>	<u>Standard/test method:</u>	<u>Performance/value:</u>
Use Class	EN 335	Use Class 3 (Planed after impregnation)
Use Class	EN 335	Use Class 2 (Not planed after impregnation)
Durability Class	EN 113	With a mass loss of $\leq 3\%$ (corresponding to durability class 1 in EN 350)
Fire classification	Reaction to Fire: EN 13501	D-s2,d0 with/without surface treatments B-s2,d0 with fire-retardant surface treatment
Penetrations class	EN 351	NP5

#### 5. Application

Superwood is suitable for outdoor use such as façade cladding and must not be used indoors. Superwood should not be used in permanent ground contact and must not be used in contact with aquatic environments or with food and feed products. From the moment it is received, Superwood can be handled as untreated wood.

#### 6. Machining

Since Superwood is through-impregnated, machining can be carried out without exposing untreated wood. When machining with power tools, the same safety precautions should be observed as when working with ordinary untreated softwood, meaning that dust exposure from high-speed tools should be minimised as much as possible. Superwood can be machined using the same tools as for untreated softwood and with the same level of wear. Superwood does not contain substances that are corrosive to metals

#### 7. Surface treatment

Superwood paints industrially using brush/spray application equipment, in transparent, opaque, and fire-retardant coating systems. We use high-quality products from selected paint suppliers.

#### 8. Disposal

As Superwood is impregnated solely with organic fungicides, it can be disposed of as ordinary combustible waste at conventional waste incineration plants as non-hazardous waste. Superwood must not be disposed of as wood for recycling where there is a risk of it being reused indoors.

#### 9. Further information

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