

ENVIRONMENT

ASPECTS AND IMPACTS

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THE INCLUSION OF EXTERIOR WFX

The inclusion of Exterior WFX flame retardant treated timber within a building project has a negligible effect on environmental issues as compared with untreated timber. WFX treated timber has been pressure impregnated with a water based amino resin by controlled vacuum pressure process. The WFX flame retardant agent contains no halogens, cyanide, ammonium or boron. After impregnation, the timber is kiln dried before being subjected to a high temperature curing process which chemically converts the water soluble chemicals to a permanently bonded high molecular weight water insoluble resin.



THIRD PARTY MONITORED
RISE (No Body 0402)



EN16755 EXT
TG 0263-08



EN 14915:2013+A2:2020
0402-CPR-SC0250-15

SECURED

The impregnation plant is fully secured to eliminate environmental release and all chemicals used are recycled in the process.

HANDLED

ExteriorWFX treated timber should be handled with the same precautions as untreated wood. No additional considerations are needed.

RECYCLED

Construction waste and recycling of used material can be used in other conditions such as new construction or incineration for CO2 neutral heat extraction

LISTED

ExteriorWFX is listed in the Wood Protection Association Fire Retardant Manual as an approved Leach Resistant (LR) industrial treatment.

→ What distinguishes WFX from traditional flame retardants.

The chemical curing process is a form of wood modification which results in permanent non-hygroscopic flame protection that lasts for the useful life of the wood product itself. In the event of a fire, the treated timber produces only carbon dioxide, moisture and carbon char and generates little or no smoke, and in service, the treated timber emits no VOC's and has no known significant environmental effects.

→ Crosslink reaction.

WFX flame retardant chemicals is only used at Woodsafe Timber Protection's timber impregnation facility in Västerås, Sweden and the classifiable components on the SDS does not apply to the treated timber since the high temperature curing process initiates a polymerisation crosslinking reaction consuming the volatile components.

→ Biological durability.

Exterior WFX acts as a flame retardant and also provides improved biological durability. The modification achieved by the permanently bound water-insoluble resin formed in the wood shows a permanent physical resistance (improved biological durability) to rot and insects under laboratory test conditions. Exterior WFX does not contain any specific wood preservative chemicals or silicon compositions.

→ Environment and health assessment.

Woodsafe WFX is reported and assessed in several different systems, for example Byggarubedömningen and Sunda Hus with assessment A. Environmental, safety data sheet and instructions are available for download at:
<https://www.woodsafese.com/en/content/download>

→ What distinguishes WFX from traditional flame retardants.

Woodsafe constantly strives to improve our processes and sustainability work throughout the treatment process and we are committed to using the best available energy resources such as our solar energy plant for all process and forklifts and biofuel for drying and heating of building.

→ Woodsafe holds ISO 14001:2015 and ISO 9001:2015.

ISO 14001 enforcing strict operating parameters in terms of health, safety and security, and close consideration of the impact of treatment on the environment.

ISO 9001 ensuring total quality control throughout the treatment process and are fully compliance with the guidelines listed in the Wood Protection Association Quality Scheme (WPA).