

Technical Data Sheet

Prefere 13H510

Urea-melamine-formaldehyde resin

TC (technical conditions) 2223-013-72149825-2014

Description

Prefere 13H510 is a modified urea-melamine-formaldehyde-condensation product with very low content of formaldehyde. Observing the recommended application conditions OSB boards of class OSB 3 and OSB 4 according to EN 300 can be produced.

Observing the recommended conditions of use, particleboards and OSB can be produced which fulfill all actual requirements concerning the subsequent formaldehyde emission according to EN 312 (class E1) and EN 300 (class 1).

Specifications

Parameter	Range of values	Method
Appearance	Colourless to turbid liquid	Internal TC, p.4.2
Solid content (3h/105°C), %	66 ÷ 69	Internal TC, p.4.3
Solid content (2h/120°C), %	65 ÷ 68	Metadynea method**
pH at 20°C	7,5 ÷ 10,0	Internal TC, p.4.4
Free formaldehyde content, %*	≤ 0,2	Internal TC, p.4.5
Viscosity at 20°C, cP (mPa·s)	300 ÷ 500	Internal TC, p.4.6
Viscosity at 20°C, FC4, s	50 ÷ 85	Internal TC, p.4.7
Gel time at 100°C, s*	65 ÷ 85	Metadynea method**
Density at 20°C, kg/m ³	1280 ÷ 1300	Internal TC, p.4.8
Storage stability at 20°C, days	21	-

* Data is reported only for information and is not reported in each quality passport on delivered resin.

** Method is sent to customer additionally.

Form of delivery

liquid, in road trucks or rail trucks.

Processing indications

Preferably Prefere 13H510 can be used as surface and core layer resin for OSB for use in humid conditions (OSB/3, OSB/4).

For better resin distribution on the strands Prefere 13H510 can be diluted with water. The extent of dilution depends on the desired moisture content of the glued strands.

For hardening Prefere 13H510 in the hot press, suitable hardener systems (e. g. ammonium salts of strong an-organic acids) have to be added. Dosing of the hardener depends on press conditions (press-temperature, press-time). It can be useful to add suitable formaldehyde-catchers to the glue-mix. Due to the varying plant designs, the processing conditions have to be adapted to the different concepts.

Gluing factors

The gluing factors using Prefere 13H510 depend on various parameters, as e.g. plant design, used wood species and quality of the strands.

Storage

Storage tanks for resin Prefere 13H510 can be made of steel, concrete or plastic. They should be protected against direct sunshine, especially in summer. Storage tanks preferably are protected by insulation or by embedding to the ground against extreme temperatures.

Storage of glue resins should be preferably at temperatures 15 – 20 °C. Storage at lower temperatures can cause higher viscosities of resin and possible pumping problems.

Storage stability of resin at 20 °C is 21 days. At higher temperatures the storage stability decreases significantly. Please take care of a careful supervision of amounts and age of glue resins in your storage tanks. Always use the principle „first in - first out“. Please check also viscosity, pH and temperature on regular base in case the resin is older than 10 days.

Notice

All properties of Prefere 13H510 are measured when the resin is loaded. This means some specifications, especially the pH, are changing during transport and can be below specification when arriving.

In case of any parameter being out of specification the technical contact from Metadynea has to be informed within 24 hours after arrival of the resin to clarify the further approach. Metadynea will deny all claims when this procedure was not observed.

NOTE! The information in this leaflet is, to the best of our knowledge, true and accurate. Any recommendations or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. We further point out that patents may exist for certain applications.