

Technical Data Sheet

Prefere 10F101

Urea-formaldehyde resin

TC (technical conditions) 2223-001-72149825-2004

Description

Prefere 10F101 is an aqueous urea-formaldehyde-condensation product with low content of formaldehyde and is used for the production of particleboards for the use in dry conditions.

Observing the recommended conditions of use, particleboards can be produced which fulfill all actual requirements concerning the subsequent formaldehyde emission according to EN312, which defines the emission class E1.

Specifications

Parameter	Range of values	Method
Appearance	Milky-white 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)	350 ÷ 600	Internal TC, p.4.6
Viscosity at 20°C, FC4, s	60 ÷ 105	Internal TC, p.4.7
Gel time at 100 °C, s*	35 ÷ 55	Metadynea method**
Density at 20°C, kg/m ³	1270 ÷ 1310	Internal TC, p.4.8
Storage stability at 20°C, days	28	-

* 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

Various indications which have to be considered using Prefere 10F101 are described in our common product leaflet „PREFERE™ particleboard glue resins“ with special reference to storage stability, influence of caustic substances, humidity of glued particles and physiological effects.

Gluing factors

The gluing factors using Prefere 10F101 depend on various parameters, as e.g. type of wood as well as form, preparation and classification of particles.

Storage

Storage tanks for resin Prefere 10F101 can be made of iron, steel, plastic (glass fibre reinforced plastic) or aluminium. 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 28 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 10F101 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.

During the production of E1-particleboards it must be taken into consideration not to use recycle materials (glued particles or sanding dust) which contain formaldehyde rich glue resins.

After hot pressing sufficient cooling must take place. Hot stacking of boards at higher temperatures than 70 °C may cause hydrolysis and loss of bonding strength.

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.