

# Technical Data Sheet

## Prefere 11F304

Urea-formaldehyde resin

TC (technical conditions) 2223-003-72149825-2004

### Description

Prefere 11F304 is an aqueous urea-formaldehyde-condensation product with very low content of formaldehyde and was specially developed for the production of medium density fibre boards (MDF).

Observing the recommended conditions of use MDF boards can be produced with Prefere 11F304 which fulfil all actual requirements concerning the subsequent formaldehyde emission according to EN 622 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)	450 ÷ 650	Internal TC, p.4.6
Viscosity at 20°C, FC4, s	75 ÷ 110	Internal TC, p.4.7
Density at 20°C, kg/m <sup>3</sup>	1270 ÷ 1310	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

Various indications which have to be considered using Prefere 11F304 are described in our common product leaflet „PREFERE™ MDF glue resins“ with special reference to storage stability, influence of caustic substances, humidity of the glued fibre and physiological effects.

## Gluing factors

The gluing factors using Prefere 11F304 depend on various parameters, as e.g. type of wood as well as form, preparation and classification of the fibre, humidity of the glued fibre, type and quantity of hardener, other additives and type of introduction, press regimes etc.

## Storage

Storage tanks for resin Prefere 11F304 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 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 11F304 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.

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.