

Melamine urea formaldehyde powder resin

MUF

MUF is a powder melamine urea formaldehyde resin, which must be dissolved in water prior to use. When used with the hardener, it provides an excellent adhesive for any kind of wood gluing.

Physical and chemical specifications

Parameter	Value	Unit
Appearance	White free flowing powder	
pH (1:1) at 20 °C	8.0 – 9.0	pH units
Humidity	1.5 max	%
Free formaldehyde	0.5 max	%
Gel time (1:1) at 100 ⁰ C Using 3 % NH ₄ CL (20%)	50 – 70	sec
Viscosity (2:1) at 20 ⁰ C	1500 max	cps

Glue formulations

Type	Quantity
MUF	100 Parts by weight.
Water	100 Parts by weight.
* Hardener	2.5 Parts by weight.

Dissolving the resin:-

- 1) Take all water** in the mixer***.
- 2) Add required amount of MUF and mix until a homogenous solution is obtained.
- 3) Hardener is added.

* The hardener quantity depends on pressing conditions like temperature, timing, pressure and thickness.

** Water temperature should be 20 – 30 °C because with lower temperature mixing is more time consuming.

*** A mechanical stirrer may be used for this purpose.

With high speed mixer all the water may be placed first and then resin may be added, while mixer is running.

With low speed mixer, it is better to make a homogenous mix of the resin with about 2/3 of water, and rest of the water may be added later.

Major application areas

- Very good adhesives for wooden materials.
- Wide variety of end uses such as wood-based panels, furniture, load – bearing constructions and wooden building products.

Packing ,Handling & storage

Packing : • 25 Kgs.nett laminated polyethylene bags.

Handling : Like any formaldehyde product, MUF contains free formaldehyde. This may cause dermatitis, when it comes into contact with skin of sensitive persons. Skin contact with powder should be avoided. Hands should be thoroughly washed with soap and hot water at the end of the working day and before meals. A dust mask should be worn, while emptying the bags.

Storage : The powder should be stored in the original bags in a cool place protected from heat. Care should be taken that powder doesn't absorb moisture and water. The bags which have been opened should be carefully closed before storage. When stored in original bags at 20⁰C, shelf life would not be less than one year.