



Urea Formaldehyde Resin (UF Resin)

Specifications

CAS NO. 9011-05-6

Properties	Unit	UFORES 201P	UFORES 301P	Test Method
Powder				
Appearance	-	White free flowing powder		-
Bulk Density	g/cm ³	0.40 Min .	0.40 Min .	RLWI – 14
Volatile Content (105°C/1 hr.)	%	3.50 Max.	< 3.50	RLWI – 17
Free Formaldehyde	%	2.70 Max.	1.50 Max.	RLWI – 18
Solution in water 2:1				
Viscosity at 25 °C	cP	2,500 – 5,000	2,000 – 4,000	RLWI - 21
pH @ 25 °C	-	8 - 9	8 - 9	RLWI - 22
*Gel Time @ 90 °C	second	40 – 50	50 – 80	RLWI - 19
*Gel Time @ 50 °C	minute	2 – 3	4 – 10	RLWI - 19

* 100 g glue + 10 ml 20% NH₄Cl

The reactivity of the glue can be adjusted over a wide range by varying the composition and amount of hardener.

The reactivity of the glue is expressed in terms of gelation time at 100°C.

Glue Formulation

	UFORE S 201P	UFORE S 301P
Resin	100 parts by weight	100 parts by weight
Flour*	10 or 50 parts by weight	-
Water	50 parts by weight**	82 parts by weight
Urea	-	10 - 15 parts by weight
Hardener	5 parts by weight (AU 1387 or AU 983)	3 parts by weight (AU 7030)
Wax Emulsion	-	0.50 - 1 parts (solid basis) on dry chips weight
Gel Time @ 100°C	-	55 seconds
Gel Time @ 30°C	-	165 minutes

* Based on customer's request

** As required to adjust the viscosity (1200 ± 100 cP)

Grades

- UFORES 201P
- UFORES 301P

Major Applications

- Wood (MDF), particleboard and chipboard
- Hardwood Plywood
- Lamination Industry

Packing

- 25kg multiwall paper bag with inner polyethylene liner