

General Information

Product Name	Urea – Melamine – Formaldehyde Resin	Prepared by	Paulius Barvainis
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Description

Urea–Melamine–formaldehyde (UmF) resin is a thermosetting amino adhesive synthesized by condensation of urea, melamine and formaldehyde under controlled conditions. It is mainly used in the production of wood-based panels such as particleboard (PB) and fibreboards (MDF/HDF). The resin provides high bonding strength, water resistance, and stable processing behaviour under hot-pressing conditions, and is formulated to meet **E1 formaldehyde emission requirements (EN 717-1)**, with other emission levels available upon request.

Resin properties	Unit	Test Method	Standard requirements				
			MKF-F4I3	MKF-F4I3.5	MKF-F4I4	MKF-F4I5	MKF-HMN
Appearance	-	-	Whitish liquid				
Solid content	%	LST EN 827	68.5±1	68.5±1	68±1	68±1	68.5±1
Dynamic viscosity	mPa·s	LST EN 12092	450±100	450±100	450±100	450±100	300±100
pH	-	LST EN 1245	8.5±1	8.5±1	8.5±1	8.5±1	8.5±1
Gel time	s	-	105±30	120±30	110±30	120±30	120±30
Water tolerance	-	-	(1:1) - (1:4)	(1:1) - (1:4)	(1:1) - (1:4)	(1:1) - (1:4)	(1:1) - (1:4)
Apparent viscosity	s	LST EN 12092	100±20	100±20	100±20	100±20	80±20
Density	kg/m ³	-	1285±10	1285±10	1285±10	1285±10	1285±10
Life time at 25 °C	days	-	21	21	21	21	21
Note: Detailed information on the formaldehyde-to-urea molar ratio and, where applicable, melamine content is available upon request and can be tailored to meet specific customer requirements.							

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