

## Urea Molding Compound

Thai KK Urea Molding Compound is a thermosetting compound composed of urea formaldehyde resin reinforced with alpha-cellulose pulp, of which it is available in wide range of colors for both compression and injection molding.

Molded parts from Thai KK Urea Molding Compound exhibit the excellent properties of high mechanical strength, electrical arc and insulation resistance, flame resistance, chemical resistance and anti-bacterial property.

### Typical properties

PROPERTY	UNIT	COMPRESSION TYPE	INJECTION TYPE
Appearance	-	Granular form	Granular form
Specific Gravity	-	1.45 – 1.55	1.45 – 1.55
Bending Strength (normal state)	MPa	78.0 Min.	78.0 Min.
Charpy Impact Strength , notched	kJ/m <sup>2</sup>	2.0 Min.	2.0 Min.
Water Absorption	%	1.5 Max.	1.5 Max.
Insulation Resistance (normal state)	Ω	10 <sup>9</sup> Min.	10 <sup>9</sup> Min.
Insulation Resistance (after boiling)	Ω	10 <sup>5</sup> Min.	10 <sup>5</sup> Min.
Arc-proof property	s	80.0	80.0
Flammability UL 94	Class	V-0	V-0
Disc Flow (2 g material, at 140°C)	mm.	105 Min.	115 Min.
Curing time (2 g material, at 140°C)	sec.	30 Min.	50 Min.

### Molding condition

TYPE	ITEM	UNIT	CONDITION
COMPRESSION	Mold Temperature	°C	140 - 155
	Mold Pressure	kg/cm <sup>2</sup>	150 - 200
INJECTION	Barrel Zone Temperature	°C	50 - 70
	Barrel Front Zone Temperature	°C	70 - 90
	Nozzle Temperature	°C	80 - 100
	Mold Temperature	°C	140 - 155
	Injection Pressure	kg/cm <sup>2</sup>	70 - 150

### Material handling, Package and Storage

Material is supplied in multiwall bag, generally 25 kg bag, the material should be stored in a cool (below 30°C) and dry place, and protected from moisture. Shelf life of material is 3 months.

