

# Melochem Moulding Compound 791

## Compression Grade\_ Powder

Melochem  
Powder  
Compression Grade 791

The Melochem 791 Moulding Compound in powder form are based on melamine-formaldehyde resins fortified with high-class cellulose as reinforcement and further modified with minor amounts of special purpose additives, pigments, cure regulators and lubricants.

The Melochem 791 Moulding Compounds can be supplied in most colours from translucent pastels to black.

Moulded parts are free from odour, light stable and have good moisture resistance.

Hard and Glossy surface with excellent scratch and chemical resistance. Fats, oils and common organic solvents like alcohol and acetone do not attack the materials and they are also resistant to surfactants and weak bases. They will also withstand attack from weak acids for a shorter duration.

Oxygen index is 40% and is achieved without the use of external flame retardants. No halogens are present in the composition.

The products comply with the requirements of the widely used material specifications :

DIN 7708 type 152 and 152.7 (\*)  
ISO 2112 type MF B10 and B11 (\*)  
UL certified  
(\*) included in ISO 14528



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<b>Fields of application</b>	<p>Unique porcelain-like properties, unmatched by any other plastic material, makes Melochem 791 Moulding Compound particularly suitable for a number of household and foodservice applications including dinnerware, ramekins, ashtrays, jugs, ladles, bowls and similar objects.</p> <p>Melochem 791 is also used in the manufacture of retail, commercial and military grade buttons.</p> <p>By pressing a foil onto the surface, unlimited range of decorative patterns can be achieved.</p> <p>The moulded items exhibit low water absorption properties and are therefore are dishwasher safe.</p>
<b>Recycling</b>	<p>Products made out of our Melochem 791 grades can be recycled. The normal method is to grind used parts, scrap etc. into a particle size suitable for plastic blast media. This blasting product is then used for cleaning sensitive metal surfaces as an alternative to conventional harsh abrasives and chemical based stripping agents.</p>
<b>Environment</b>	<p>Most components of our melamine-formaldehyde resins are derived from renewable natural resources. On decomposition, products made from melamine- formaldehyde compounds end up as natural harmless elements such as nitrogen and carbon dioxide. Moreover, as potentially carcinogenic flame-retardants are not required, the risk to health is reduced. Therefore the Melochem 791 thermoset compound is the right choice for customers who are working with environmental management systems and sustainable development.</p>
<b>Packaging and storage</b>	<p>Available in bags, drums, gaylords or big-bags. Store product in cool and dry indoor space. Storage below 20°C will provide a shelf life of minimum 6 months.</p>



Property	Unit	Value	Test Method	
Shrinkage	%	0.6 – 0.8	ISO 2577	
Post_Shrinkage	%	1.0 – 1.3	ISO 2577	
Density	g/cm <sup>3</sup>	1.50	ISO 1183	
Water absorption	mg	< 200	ISO 62	
Flexural strength	MPa	≥ 80	ISO 178	
Tensile strength	MPa	≥ 45	ISO 527	
Impact strength	KJ/m <sup>2</sup>	≥ 5	ISO 179/1 eU	
Notched impact strenght	KJ/m <sup>2</sup>	≥ 1.1	ISO 179/1 eA	
HDT 8.0 MPa	°C	≥ 110	ISO 75	
Glow bar 960 °C 180 sec.	Class	≤ B H2-10	IEC 707	
Flammability UL 94	Class	V-0	UL 94	
Oxygen Index	%	> 40	ASTM D2863	
Surface resistance	logΩ	≥ 10	IEC 93	
Dissipation factor, 1 kHz	Delta tan	≤ 0.1	IEC 250	
Dielectric constant		5	DIN 53483	
Proof_Tracking Index	V	≥ 600	IEC 112	
FA emission	Water	mg/l	≤ 3	ISO 4614
	Acetic Acid	mg/l	≤ 3	ISO 4614
	Ethanol	mg/l	≤ 3	ISO 4614

The information given in our datasheet, which to our knowledge is correct, does not constitute any kind of warranty or other undertaking of responsibility from Chemiplastica, but serves only as general information with respect to possible applicability of the products as well as the characteristics and handling of the products.

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