

Technical Data Sheet

PRO-CELL® Cellulose Acetate granules

(Standard and Renew)

Application/Users:

■ Frames ■ Tools handles ■ Toys / Sporting goods ■ Sequins

Product description

PRO-CELL® Cellulose acetate granules are noted for their excellent balance of properties – toughness, hardness, strength, surface gloss, clarity, and a warm feel. The mechanical properties of **PRO-CELL®** Cellulose acetate granules differ with plasticizer levels. Lower plasticizer content yield a harder surface, higher heat resistance, greater rigidity, higher tensile strength, and better dimensional stability. Higher plasticizer content increases impact strength, resistance at lower temperature, and flexibility. **PRO-CELL®** Cellulose acetate granules are available in natural, clear, color granules. **PRO-CELL®** Cellulose acetate granules is heat stabilized and it's based on a proprietary non-Phthalate formulation optimized for high quality extrusion applications.

Properties	Test Method	Units	Ref. Values
Physical			
Density	ASTM D 792	g/cm ³	1.25-1.30
Rockwell hardness	ASTM D 785	R scale	80-95
Shore hardness	ASTM D 2240	D scale	70-77
Mold shrinkage	ASTM D 955	%	0.4-0.6
Thermal			
Heat deflection	ASTM D 648		
@ 0.455 Mpa		°C	60-75
Mechanical			
Tensile strength	ASTM D 638	Mpa	30-40
Elongation at break	ASTM D 638	%	15-40
Yield Strength	ASTM D 638	MPa	20-35
Elongation at Yield	ASTM D 638	%	3-5
Tensile modulus	ASTM D 790	MPa	1100-1700
Flexural strength	ASTM D 790	Mpa	15-25
Flexural modulus	ASTM D 790	Mpa	1100-1800
Charpy impact resistance,	ISO 180	KJ/m ²	100-200
IZOD impact resistance,	ASTM D 256	KJ/m ²	10-25
Electrical			
Tracking resistance	DIN 53480	V	>600
Dielectric constant	DIN 53483	/	
@ 50Hz			5.2-6.0
@ 10 ⁶ Hz			4-5

Test conditions: conditioning the test samples at 23°C with relative humidity of 50% for 10 days

Comments

Properties reported here are typical of results range lots produced for standard extrusion applications. Eastman Mazzucchelli Plastics (Shenzhen) Co., Ltd makes no representation that the material in any particular shipment will conform exactly to the values given.

Eastman Mazzucchelli Plastics (Shenzhen) Co., Ltd and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus method. Customers have to own determination before use, for the protection of the environment, and for the health and safety of employees and purchasers of products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.