

## Arkema Group ORGASOL® 3502 D Nat 1 Copolyamide 6/12

Category : Polymer , Thermoplastic , Nylon , Nylon 612 , Nylon 612, Unreinforced

### Material Notes:

Information provided by Arkema Group

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Arkema-Group-ORGASOL-3502-D-Nat-1-Copolyamide-612.php](http://www.lookpolymers.com/polymer_Arkema-Group-ORGASOL-3502-D-Nat-1-Copolyamide-612.php)

Physical Properties	Metric	English	Comments
Density	1.07 g/cc	0.0387 lb/in <sup>3</sup>	ISO 1183
Apparent Bulk Density	0.375 g/cc	0.0135 lb/in <sup>3</sup>	ISO 1068
Water Absorption	0.95 %	0.95 %	4 days, 20°C; DIN 53 472
	0.98 %	0.98 %	24 hr, 20°C; ISO R 62
	14.75 %	14.75 %	
	@Temperature 100 °C	@Temperature 212 °F	
Particle Size	17 - 23 µm	17 - 23 µm	Average; ATO 40-41-0 (Coulter Counter)
pH	>= 4.0	>= 4.0	ATO 40-40-0 (pH meter)
Specific Surface Area	6.0 m <sup>2</sup> /g	6.0 m <sup>2</sup> /g	ATO 40-45-0 (BET)

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	75	75	ASTM D2240
Tensile Strength, Ultimate	44.0 MPa	6380 psi	ISO R527
Elongation at Break	370 %	370 %	ISO R527
Flexural Strength	30.0 MPa	4350 psi	ISO R178
Flexural Modulus	0.800 GPa	116 ksi	ISO R178
Charpy Impact Unnotched	3.00 J/cm <sup>2</sup>	14.3 ft-lb/in <sup>2</sup>	ISO R179
	2.50 J/cm <sup>2</sup>	11.9 ft-lb/in <sup>2</sup>	ISO R179
	@Temperature -40.0 °C	@Temperature -40.0 °F	
Charpy Impact, Notched	1.40 J/cm <sup>2</sup>	6.66 ft-lb/in <sup>2</sup>	ISO R179
	0.350 J/cm <sup>2</sup>	1.67 ft-lb/in <sup>2</sup>	ISO R179
	@Temperature -40.0 °C	@Temperature -40.0 °F	
Taber Abrasion, mg/1000 Cycles	52	52	500 g

Mechanical Properties	Metric	English	Comments
Thermal Properties	Metric	English	Comments
CTE, linear	127 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	70.6 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	DIN 53122
	@Temperature -60.0 - 50.0 $^\circ\text{C}$	@Temperature -76.0 - 122 $^\circ\text{F}$	
	180 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	100 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	DIN 53122
	@Temperature 50.0 - 160 $^\circ\text{C}$	@Temperature 122 - 320 $^\circ\text{F}$	
Melting Point	142 $^\circ\text{C}$	288 $^\circ\text{F}$	ISO 3146
Vicat Softening Point	125 $^\circ\text{C}$	257 $^\circ\text{F}$	ASTM D1525
Processing Properties	Metric	English	Comments
Moisture Content	2.0 %	2.0 %	ISO 1625

## Contact Songhan Plastic Technology Co.,Ltd.

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