

## Arkema Group ORGASOL® 1002 D Nat 1 Polyamide 6

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Unreinforced

### Material Notes:

Information provided by Arkema Group

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Arkema-Group-ORGASOL-1002-D-Nat-1-Polyamide-6.php](http://www.lookpolymers.com/polymer_Arkema-Group-ORGASOL-1002-D-Nat-1-Polyamide-6.php)

Physical Properties	Metric	English	Comments
Density	1.15 g/cc	0.0415 lb/in <sup>3</sup>	ISO 1183
Apparent Bulk Density	0.425 g/cc	0.0154 lb/in <sup>3</sup>	ISO 1068
Water Absorption	2.5 %	2.5 %	24 hr, 20°C; ISO R 62
	4.3 %	4.3 %	4 days, 20°C; DIN 53 472
	9.7 %	9.7 %	100°C; ATO
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	2.0 m <sup>2</sup> /g	2.0 m <sup>2</sup> /g	ATO 40-45-0 (BET)

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	84	84	ASTM D2240
Tensile Strength, Ultimate	69.0 MPa	10000 psi	ISO R527
Elongation at Break	14.5 %	14.5 %	ISO R527
Flexural Strength	83.0 MPa	12000 psi	ISO R178
Flexural Modulus	1.92 GPa	278 ksi	ISO R178
Charpy Impact Unnotched	NB	NB	ISO R179
	3.00 - 4.60 J/cm <sup>2</sup> @Temperature -40.0 °C	14.3 - 21.9 ft-lb/in <sup>2</sup> @Temperature -40.0 °F	ISO R179
Charpy Impact, Notched	0.620 J/cm <sup>2</sup>	2.95 ft-lb/in <sup>2</sup>	ISO R179
	0.280 J/cm <sup>2</sup> @Temperature -40.0 °C	1.33 ft-lb/in <sup>2</sup> @Temperature -40.0 °F	ISO R179
Taber Abrasion, mg/1000 Cycles	50	50	500 g

Thermal Properties	Metric	English	Comments
CTE, linear	110 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	61.1 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	DIN 53122
	@Temperature -60.0 - 50.0 $^{\circ}\text{C}$	@Temperature -76.0 - 122 $^{\circ}\text{F}$	
	170 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	94.4 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	DIN 53122
	@Temperature 50.0 - 160 $^{\circ}\text{C}$	@Temperature 122 - 320 $^{\circ}\text{F}$	
Melting Point	217 $^{\circ}\text{C}$	423 $^{\circ}\text{F}$	ISO 3146
Vicat Softening Point	186 $^{\circ}\text{C}$	367 $^{\circ}\text{F}$	ASTM D1525

Processing Properties	Metric	English	Comments
Moisture Content	2.0 %	2.0 %	ISO 1625

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China