

Solvay TECHNYL® A 205F PA66, DRY

Category : Polymer , Thermoplastic , Nylon , Nylon 66

Material Notes:

Description: TECHNYL® A 205F is an unreinforced polyamide 66 for injection molding. It is available in natural color. Benefits: The product offers two main advantages: excellent filling qualities and UL 94 V2 under 0.4 mm. It is particularly suitable for the molding of long parts with thin wall sections. Available in: Asia Pacific, Europe, Latin America and North America Regulations compliance: Grades produced or imported in Europe comply with directive 453/2010/EC, which amends REACH directive 1907/2006/EC, This grade complies with RoHS directive 2002/95/EC. Unless specified, this grade is not suitable for food contact, medical devices or toy applications. Applications: Cable ties, fasteners or connectors Information provided by Rhodia, Rhodia has been acquired by Solvay.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-TECHNYL-A-205F-PA66-DRY.php

Physical Properties	Metric	English	Comments
Density	1.14 g/cc	0.0412 lb/in ³	ISO 1183/A
Water Absorption	1.2 % @Temperature 23.0 °C, Time 86400 sec	1.2 % @Temperature 73.4 °F, Time 24.0 hour	ISO 62
Viscosity	20 cP @Shear Rate 10000 1/s, Temperature 300 °C	20 cP @Shear Rate 10000 1/s, Temperature 572 °F	
	21 cP @Shear Rate 10000 1/s, Temperature 290 °C	21 cP @Shear Rate 10000 1/s, Temperature 554 °F	
	22 cP @Shear Rate 10000 1/s, Temperature 280 °C	22 cP @Shear Rate 10000 1/s, Temperature 536 °F	
	50 cP @Shear Rate 1000 1/s, Temperature 300 °C	50 cP @Shear Rate 1000 1/s, Temperature 572 °F	
	80 cP @Shear Rate 1000 1/s, Temperature 290 °C	80 cP @Shear Rate 1000 1/s, Temperature 554 °F	
	90 cP @Shear Rate 100 1/s, Temperature 300 °C	90 cP @Shear Rate 100 1/s, Temperature 572 °F	

Physical Properties	101 cP Metric	101 cP English	Comments
	@Shear Rate 1000 1/s, Temperature 280 Â°C	@Shear Rate 1000 1/s, Temperature 536 Â°F	
	120 cP	120 cP	
	@Shear Rate 100 1/s, Temperature 280 Â°C	@Shear Rate 100 1/s, Temperature 536 Â°F	
	120 cP	120 cP	
	@Shear Rate 100 1/s, Temperature 290 Â°C	@Shear Rate 100 1/s, Temperature 554 Â°F	
Linear Mold Shrinkage	0.010 cm/cm	0.010 in/in	Isotropy
Linear Mold Shrinkage, Flow	0.019 cm/cm	0.019 in/in	
Linear Mold Shrinkage, Transverse	0.019 cm/cm	0.019 in/in	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	60.0 MPa	8700 psi	ISO 527 Type 1A
Tensile Stress	15.0 MPa	2180 psi	
	@Strain 10.0 %, Temperature 150 Â°C	@Strain 10.0 %, Temperature 302 Â°F	
	19.0 MPa	2760 psi	
	@Strain 10.0 %, Temperature 120 Â°C	@Strain 10.0 %, Temperature 248 Â°F	
	21.0 MPa	3050 psi	
	@Strain 20.0 %, Temperature 150 Â°C	@Strain 20.0 %, Temperature 302 Â°F	
	24.0 MPa	3480 psi	
	@Strain 30.0 %, Temperature 150 Â°C	@Strain 30.0 %, Temperature 302 Â°F	
	25.0 MPa	3630 psi	
	@Strain 10.0 %, Temperature 80.0 Â°C	@Strain 10.0 %, Temperature 176 Â°F	
	25.0 MPa	3630 psi	
	@Strain 20.0 %, Temperature 120 Â°C	@Strain 20.0 %, Temperature 248 Â°F	
	30.0 MPa	4350 psi	
	@Strain 30.0 %, Temperature 120 Â°C	@Strain 30.0 %, Temperature 248 Â°F	
	39.0 MPa	5660 psi	

Mechanical Properties	Metric	English	Comments
	@Strain 20.0 %, Temperature 80.0 Å°C	@Strain 20.0 %, Temperature 176 Å°F	
	42.0 MPa	6090 psi	
	@Strain 30.0 %, Temperature 80.0 Å°C	@Strain 30.0 %, Temperature 176 Å°F	
	45.0 MPa	6530 psi	
	@Strain 40.0 %, Temperature 80.0 Å°C	@Strain 40.0 %, Temperature 176 Å°F	
	70.0 MPa	10200 psi	
	@Strain 2.50 %, Temperature 23.0 Å°C	@Strain 2.50 %, Temperature 73.4 Å°F	
Tensile Strength, Yield	85.0 MPa	12300 psi	ISO 527 type 1 A
	155 MPa	22500 psi	ASTM D638
Elongation at Break	25 %	25 %	ASTM D638
	50 %	50 %	ISO 527 Type 1A
Elongation at Yield	4.0 %	4.0 %	ISO 527 type 1 A
Tensile Modulus	3.20 GPa	464 ksi	ISO 527 Type 1A
Flexural Strength	120 MPa	17400 psi	ISO 178
	125 MPa	18100 psi	ASTM D790
Flexural Modulus	3.00 GPa	435 ksi	ISO 178
	3.35 GPa	486 ksi	ASTM D790
Izod Impact, Notched (ISO)	5.00 kJ/mÅ²	2.38 ft-lb/inÅ²	ISO 180/1A
	80.0 kJ/mÅ²	38.1 ft-lb/inÅ²	ISO 180/1A
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
Charpy Impact, Notched	0.500 J/cmÅ²	2.38 ft-lb/inÅ²	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	7.00 Åµm/m-Å°C	3.89 Åµin/in-Å°F	ISO 11359
	@Temperature 23.0 - 85.0 Å°C	@Temperature 73.4 - 185 Å°F	
CTE, linear, Transverse to Flow	7.00 Åµm/m-Å°C	3.89 Åµin/in-Å°F	ISO 11359
	@Temperature 23.0 - 85.0 Å°C	@Temperature 73.4 - 185 Å°F	

Thermal Properties	Metric	English	Comments
	263 Â°C	505 Â°F	ISO 11357
Deflection Temperature at 1.8 MPa (264 psi)	80.0 Â°C	176 Â°F	ASTM D648
Flammability, UL94	V-2	V-2	ISO 1210
	@Thickness 0.400 mm	@Thickness 0.0157 in	
	V-2	V-2	ISO 1210
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	V-2	V-2	ISO 1210
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Oxygen Index	29 %	29 %	ISO 4589
Glow Wire Test	850 Â°C	1560 Â°F	ISO 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093
Surface Resistance	5.00e+14 ohm	5.00e+14 ohm	IEC 60093
Dielectric Constant	2.9	2.9	IEC 60250
Dielectric Strength	27.0 kV/mm	686 kV/in	IEC 60243
Dissipation Factor	0.030	0.030	IEC 60250
Comparative Tracking Index	550 V	550 V	Solution B; IEC 60112
	600 V	600 V	Solution A; IEC 60112

Processing Properties	Metric	English	Comments
Feed Temperature	265 - 275 Â°C	509 - 527 Â°F	
Mold Temperature	60.0 - 80.0 Â°C	140 - 176 Â°F	
Drying Temperature	80.0 Â°C	176 Â°F	
Moisture Content	<= 0.20 %	<= 0.20 %	

Descriptive Properties	Value	Comments
Compression Zone	270-280Â°C	
Mixing Zone	280-290Â°C	

Descriptive Properties	Value	Comments
Contact Songhan Plastic Technology Co.,Ltd.		

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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