

TECHNYL® SAFE A 402FC NC

DOMO Engineering Plastics - Polyamide 66

General Information

Product Description

*Previously TECHNYL A 402 NATURAL FA

TECHNYL SAFE A 402FC NC is a polyamide PA66, unfilled, very high viscosity, food contact approved for extrusion. Designed to offer higher impact resistance at low humidity levels, good rigidity and excellent compression resistance of extruded parts requiring also food contact compliance in industrial consumer good as well as appliance applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Impact Modifier		
Features	• Food Contact Acceptable • High Viscosity	• Impact Modified • Wear Resistant	
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • Industrial Applications	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Extrusion		
Resin ID (ISO 1043)	• PA66		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.7	--	%	
Flow	1.7	--	%	
Water Absorption (24 hr, 73°F)	1.5	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	450000	189000	psi	ISO 527-1
Tensile Stress (Break)	7250	4350	psi	ISO 527-2
Tensile Strain (Break)	30	150	%	ISO 527-2
Flexural Modulus	406000	152000	psi	ISO 178
Flexural Stress	17400	6530	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.3	14	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact Strength (73°F)	2.6	9.5	ft·lb/in ²	ISO 180/1A
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	374	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	149	--	°F	ISO 75-2/A
Melting Temperature ²	505	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	--	ohms	IEC 62631-3-2
Volume Resistivity	1.0E+13	--	ohms·m	IEC 62631-3-1
Electric Strength	560	--	V/mil	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 0	--		IEC 60112
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302



Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Drying Time	8.0 hr
Dew Point	-31 °F
Suggested Max Moisture	0.080 %

Injection Notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

Extrusion	Dry Unit
Cylinder Zone 1 Temp.	536 to 572 °F
Cylinder Zone 2 Temp.	518 to 554 °F
Cylinder Zone 3 Temp.	518 to 554 °F
Cylinder Zone 4 Temp.	518 to 554 °F
Cylinder Zone 5 Temp.	518 to 554 °F
Melt Temperature	500 to 572 °F
Die Temperature	500 to 536 °F

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

