

# Chemlon® 106 H

Teknor Apex Company - Polyamide 66

Saturday, September 14, 2024

## General Information

### Product Description

Chemlon® 106H is an impact modified polyamide 66 (PA 66) designed for injection molding and extrusion. This toughened material offers strength and flexibility, even at low temperatures; and is available globally.

### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer • Impact Modifier		
Features	• Good Toughness • Low Temperature Toughness		
RoHS Compliance	• Contact Manufacturer		
Automotive Specifications	• DAIMLER DBL 5410.00 <sup>1</sup>		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

## ASTM & ISO Properties<sup>2</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.11	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.6	--	%	
Flow	1.5	--	%	
Water Absorption (24 hr, 23°C)	1.3	--	%	ISO 62
Water Absorption Saturation, 23°C	7.2	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	2450	882	MPa	ISO 527
Tensile Stress	58.0	45.0	MPa	ISO 527
Tensile Strain (Break)	50	190	%	ISO 527
Flexural Modulus	2000	789	MPa	ISO 178
Flexural Stress	80.0	23.0	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
23°C	25	110	kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength	No Break	No Break		ISO 179
Notched Izod Impact Strength				ISO 180
23°C	20	96	kJ/m <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/B
0.45 MPa, Unannealed	215	--	°C	
Deflection Temperature Under Load				ISO 75-2/A
1.8 MPa, Unannealed	70.0	--	°C	
Melting Temperature	259	--	°C	ISO 11357
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.8 mm)	HB	--		UL 94

Revision Date: 8/1/2024

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### Legal Statement

Dry

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### Processing Information

Injection	Dry Unit
Drying Temperature	80 °C
Suggested Max Moisture	0.20 %
Processing (Melt) Temp	265 to 293 °C
Mold Temperature	77 to 88 °C

### Injection Notes

Maximum peak injection pressure should not exceed 80% of the machine's maximum pressure capability. Start with a holding pressure that is half the peak injection pressure. Perform a rheology curve in order to determine appropriate injection rate.

### Notes

<sup>1</sup> Automotive site approvals apply for US manufactured compound only

<sup>2</sup> Typical properties: these are not to be construed as specifications.

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