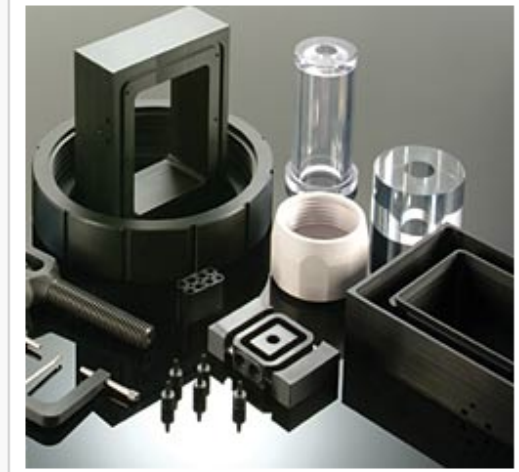


## TECAMID 66 - extruded nylon 66

Nylon was the first engineering resin. It has been used in applications ranging from electronic, marine, and automotive industries to fibers used to make carpet. Nylon has outstanding wear resistance and low frictional properties. It has very good temperature, chemical, and impact properties. However, nylon's one weakness is a propensity to absorb moisture and thus have poor dimensional stability.



- **TECAMID™ 6/6**  
Type 6/6 general purpose standard grade nylon. Extruded in natural and black. (Weather Resistant Black Grade is also available as a custom.)
- **TECAMID™ 6/12**  
Type 6/12 nylon. This nylon has lower moisture absorption rates than nylon 6/6, hence superior dimensional stability.
- **TECAMID™ ST**  
Type 6/6 nylon. Super Tough nylon. Increased impact resistance and toughness over Tecamid™ 6/6.
- **TECAMID™ HS**  
Type 6/6 nylon. Heat Stabilized nylon. Increased ability to withstand the negative effects of heat exposure and increased overall service temperature over Tecamid™ 6/6.

*TECAMID® has an excellent balance of properties which make it an ideal material for metal replacement in applications such as automotive parts, industrial valves, railway tie insulators, and other industry uses whose design requirements include high strength, toughness, and weight reduction.*

see properties on page 2

**CURBELL**  
PLASTICS

**1-888-CURBELL**

[www.curbellplastics.com](http://www.curbellplastics.com)

Curbell Plastics is a proud supplier of Ensinger materials.

## TECAMID 66 - extruded nylon 66

	Properties	Condition	Value		Test Method	Comment
<b>Mechanical</b>	Modulus of elasticity (tensile test)		350,000	psi	ASTM D 638	
	Tensile strength at yield	@ 73°F	12,000	psi	ASTM D 638	
	Elongation at break	@ 73°F	25	%	ASTM D 638	
	Flexural Strength	@ 73°F	15,500	psi	ASTM D 790	
	Modulus of elasticity (flexural test)	@ 73°F	440,000	psi	ASTM D 790	
	Compression strength	@ 1% strain	5,000	psi	ASTM D 695 1)	1) Injection molded sample
	Impact strength (Izod)	@ 73°F	1.1	ft-lbs/in	ASTM D 256	
	Rockwell hardness	@ 73°F M scale	90	%	ASTM D 785	
	Coefficient of friction	Dynamic, 40 psi, 50 fpm	0.26		ASTM D 3702	
	Wear rate	40 psi, 50 fpm	$200 \times 10^{-10}$	in <sup>3</sup> -min/ft-lbs-hr	ASTM D 3702	
<b>Thermal</b>	Melting temperature		491	°F	ASTM D 2133	
	Deflection temperature	@ 264 psi	194	°F	ASTM D 648	
	Deflection temperature	@ 66 psi	450	°F	ASTM D 648	
	Service temperature	Short term	300	°F	-	
	Service temperature	Long term Short term	185	°F	-	
	Thermal expansion (CLTE)		$4.5 \times 10^{-5}$	in/in/°F	ASTM D 696	
	Specific heat		0.4	BTU/lb-F°	-	
<b>Electrical</b>	Volume resistivity		$10^{-15}$	Ω*cm	ASTM D 257	
	Dissipation factor	@ 60 Hz, 70°F	0.01	%	ASTM D 150	
	Dielectric constant	@ 60 Hz, 70 °F, 50% RH	4	%	ASTM D 150	
	Dielectric constant	@ 1 MHz	3.6		ASTM D 150	
<b>Other</b>	Water absorption	@ 24 hrs, 73°F	1.2	%	ASTM D 570	
	Moisture absorption	@ saturation, 73°F	8.5	%	ASTM D 570	
	Flammability (UL94)		V-2		2)	2) 6.0 mm sample extruded

This information is only to assist and advise you on current technical knowledge and is given without obligation or liability. All trade and patent rights should be observed. All rights reserved. Data obtained from extruded shapes material.