

Product Data Sheet & General Processing Conditions

Nylabond® 6091-70A BLACK Speciality Thermoplastic Elastomer PA-6 bondable

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

			ASTM
PERMANENCE	English	SI Metric	TEST
Specific Gravity	0.94	0.94	D 792
MECHANICAL			
Tensile Strength			
20 in/min (500 mm/min)	685 psi	5 MPa	D 412
Tensile Elongation			
Break, 20 in/min (500 mm/min)	340.0 %	340.0 %	D 412
Tensile Stress			
20 in/min (500 mm/min)			
@ 100 %	400.0 psi	2.8 MPa	D 412
Tear Strength, Die C	110.0 pli	19.3 N/mm	D 624
Compression Set			
22 h @ 70 °C (158 °F), Method B, Type 2	44 %	44 %	D 395
22 h @ 125 °C (257 °F), Method B, Type 2	63 %	63 %	D 395
Hardness			
Shore A, 10 s delay	71	71	D 2240
THERMAL			
Ignition Resistance*			
Flammability	HB @ 0.044 in	HB @ 1.1 mm	UL94
Automotive	≤ 4.0 in/mi @ 0.080 in	≤ 102 mm/mi @ 2.0 mm	FMVSS 302
Glow Wire Ignitability Temperature	725 °C @ 1/16 in	725 °C @ 1.5 mm	IEC 60695-2-13
Glow Wire Flammability Index	700 °C @ 1/16 in	700 °C @ 1.5 mm	IEC 60695-2-12
PROPERTY NOTES			

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties. * This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric	
Melt Temperature	505 - 540 °F	263 - 282 °C	
Mold Temperature	90 - 160 °F	32 - 71 °C	
Drying	4 hrs @ 180 °F	4 hrs @ 82 °C	
Moisture Content	< 0.08 %	< 0.08 %	
PROCESSING NOTES			

4 Dec 2023 SAC

This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

RTP COMPANY • 580 EAST FRONT STREET • WINONA, MN 55987 • 507-454-6900