



Product Data Sheet & General Processing Conditions

Nylabond® 6091-55A BLACK Speciality Thermoplastic Elastomer PA-6 bondable



PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	0.94	0.94	D 792
MECHANICAL			
Tensile Strength			
20 in/min (500 mm/min)	440 psi	3 MPa	D 412
Tensile Elongation			
Break, 20 in/min (500 mm/min)	300.0 %	300.0 %	D 412
Tensile Stress			
20 in/min (500 mm/min)			
@ 100 %	250.0 psi	1.7 MPa	D 412
Tear Strength, Die C	76.0 pli	13.3 N/mm	D 624
Compression Set			
22 h @ 70 °C (158 °F), Method B, Type 2	35 %	35 %	D 395
22 h @ 100 °C (212 °F), Method B, Type 2	39 %	39 %	D 395
70 h @ 100 °C (212 °F), Method B, Type 2	46 %	46 %	D 395
22 h @ 125 °C (257 °F), Method B, Type 2	56 %	56 %	D 395
Hardness			
Shore A, 10 s delay	57	57	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

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

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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.

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