

DESCRIPTION

Aegis® H85WC01 is a medium viscosity, heat stabilized, nylon 6 wire jacket compound providing excellent performance across the range of THHN, THWN and TFFN constructions. It also offers a well-balanced set of properties including low fuming during wire extrusion, high toughness, abrasion and crush resistance, and resistance to oil, gas and other hydrocarbons. Aegis® H85WC01 nylon compound is certified under UL QMTT2 and UL QMTM2 for use in wire, cable and plenum cable applications.

PERFORMANCE OVERVIEW

TYPICAL PROPERTIES	TEST METHOD-ASTM	UNIT	VALUE
PHYSICAL PROPERTIES			
Melting Point	D-3418	°C (°F)	220 (428)
Density	D-792	g/cm ³	1.14
MECHANICAL PROPERTIES (DAM*, 23°C/73.4°F)			
Tensile Strength at Break	D-638	PSI (MPa)	11,589 (79.9)
Percent Elongation at Break	D-638	%	48.5
Flexural Strength	D-790	PSI (MPa)	16,327 (113)
Flexural Modulus	D-790	PSI (MPa)	419,022 (2,889)
Notched Izod Impact Strength	D-256	ft-lbs/in (J/m)	0.97 (51.5)

*DAM = Dry as molded

PROCESSING GUIDELINES

MATERIAL HANDLING

Aegis® H85WC01 nylon compound is supplied in sealed containers and drying prior to processing is typically not required. However, higher moisture is the primary cause of processing issues. If drying becomes necessary, a dehumidifying or desiccant dryer operating at 70°C (158°F) is recommended. Drying time is dependent on moisture level. Safe handling procedures can be found in the Safety Data Sheet available on Advansix.com.

TYPICAL EXTRUSION TEMPERATURE PROFILE

Barrel: 249–266°C (480–510°F)

Adapter: 260–266°C (500–510°F)

Die: 260–266°C (500–510°F)

Process Melt Temperature: 260–270°C (500–518°F)

NOTE

The values presented in this data sheet are typical values and are not to be interpreted as product specifications.

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CONTACT ADVANSIX

Contact AdvanSix to learn more about the benefits of Aegis® Nylon Resins.

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