

Product Specification

Product

Aegis® H8202NLB

Product Description

Aegis® H8202NLB is an unfilled, low/medium viscosity, non-lubricated nylon 6 injection molding homopolymer exhibiting excellent melt fluidity for filling thin sections. It exhibits good strength, stiffness, and toughness as well as excellent heat, chemical and abrasion resistance.

Specification:

Parameter	Test Method	Units	Value
Viscosity, FAV	ASTM D-789		49+/-3
%96 SAV			2.61
Moisture Content	ASTM D-6869	%	Max. 0.10
Extractable Content	SOP-702-307	%	Max. 0.8

General properties:

Physical	Test Method	Units	Value
Specific Gravity	ASTM D-792	sp gr 23/23°C	1.13
Mold Shrinkage linear Flow	ASTM D-955	%	1.28
Rockwell Hardness, R Scale	ASTM D-785		119
Moisture (24 Hour)	ASTM D-570	%	1.6
Moisture (50% RH)	ASTM D-570	%	2.7
Moisture (Saturation)	ASTM D-570	%	9.5
Melt Flow Rate (235C, 1Kg)	ASTM D-1238	g/10 min	9.8
Mechanical	Test Method	Units	Value
Tensile Modulus, 23°C (73°F)	ASTM D-638	MPa (psi)	2,850 (413,500)
Tensile Strength, Yield, 23°C (73°F)	ASTM D-638	MPa (psi)	79 (11,500)
Elongation, Yield, 23°C (73°F)	ASTM D-638	%	4.0
Elongation, Break, 23°C (73°F)	ASTM D-638	%	55
Flexural Modulus, 23°C (73°F)	ASTM D-790	MPa (psi)	3010 (436,000)
Flexural Strength, 23°C (73°F)	ASTM D-790	MPa (psi)	110 (15,900)
Impact	Test Method	Units	Value
Notched Izod impact -40°C (-40°F)	ASTM D-256	J/M (ft-lbs/in)	50 (0.9)
Notched Izod impact 23°C (73°F)	ASTM D-256	J/M (ft-lbs/in)	60 (1.1)
Thermal	Test Method	Units	Value
Melting Point	ASTM D-3418	°C (°F)	220 (428)
Heat Deflection @ 264 psi (1.8 MPa)	ASTM D-648	°C (°F)	65 (149)
Heat Deflection @ 66 psi (0.45 MPa)	ASTM D-648	°C (°F)	178 (352)
Coef. Of Linear Thermal Expansion	ASTM E-831	µm/mm °C	83

Product handling

This product is supplied in sealed containers and drying prior to processing is not required. However, high moisture is the primary cause of processing problems. If drying becomes necessary a dehumidifying or desiccant dryer operating at 80 °C (176 °F) is recommended. Drying time is dependent on moisture level. Further information concerning safe handling procedures can be obtained from the Material Safety Data Sheet. Alternatively, please contact your Honeywell representative.

Typical Profile

Melt Temperature 240-280 °C (464-536 °F)
Mold Temperature 80-95 °C (176-203 °F)
Injection and Packing Pressure 35-125 bar (500-1500 psi)

Mold Temperatures

A mold temperature of 80-95 °C (176-203 °F) is recommended, but temperatures as low as 10 °C (50 °F) can be used where applicable.

Pressures

Injection pressure controls the filling of the part and should not be applied for 90% of ram travel. Packing pressure affects the final part and can be used effectively in controlling sink marks and shrinkage. It should be applied and maintained until the gate area is completely frozen off.

Fill Rate

Fast fill rates are recommended to insure uniform melt delivery to the cavity and prevent premature freezing.

These values are for natural color resins only. Colorants or other additives may alter some or all of these properties. The data listed here fall within the normal range of product properties, but should not be used to establish specification limits nor used alone as the basis for design.

Disclaimer

Although all statements, information, and data given herein are believed to be accurate, they are presented without guarantee, warranty, or responsibility of any kind, express or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement, and are not suggestions to infringe any patent. The user should not assume that all safety measures are indicated, or that other measures may not be required. Further information concerning safe handling procedures can be obtained from the Material Safety Data Sheet.

Honeywell Resins and Chemicals

101 Columbia Road
Morristown, NJ 07962
Customer Service Center: 1-866-495-3477
www.honeywell-nylon6.com



© 2013 Honeywell International Inc.
All rights reserved

Honeywell