

# Aegis® H85WC01 Nylon Compound

## 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, high toughness, abrasion resistance and excellent resistance to gasoline, oil and other hydrocarbons. Aegis® H85WC01 nylon compound is certified under UL QMTT2 and UL QMTM2 for use in wire, cable, flexible lighting and plenum applications.

| Typical Properties                               | Test Method | Unit              | Value           |
|--|-------------|-------------------|-----------------|
| <b>Physical Properties</b>                       |             |                   |                 |
| Melting Point                                    | ASTM D-3418 | °C (°F)           | 220 (428)       |
| Density  | ASTM D-1505 | g/cm <sup>3</sup> | 1.13            |
| Form   | –           | –                 | Pellets         |
| <b>Mechanical Properties (DAM*, 23°C/73.4°F)</b> |             |                   |                 |
| Tensile Strength at Break                        | ASTM D-638  | PSI (MPa)         | 11,589 (79.9)   |
| Percent Elongation at Break                      | ASTM D-638  | %                 | 48.5            |
| Flexural Strength                                | ASTM D-790  | PSI (MPa)         | 16,327 (113)    |
| Flexural Modulus                                 | ASTM D-790  | PSI (MPa)         | 419,022 (2,889) |
| Notched Izod Impact Strength                     | ASTM D-256  | ft-lbs/in (J/m)   | 0.97 (51.5)     |

\*DAM = Dry as molded

## Processing Guidelines

### Material Handling

This product is supplied in sealed containers and drying prior to processing is 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. More information about safe handling procedures can be obtained by requesting the Safety Data Sheet on [AdvanSix.com](http://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)

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

### Contact AdvanSix

To learn more about the benefits of Aegis® Nylon Resins, visit [AdvanSix.com/NylonSolutions](http://AdvanSix.com/NylonSolutions) or call: **1-844-890-8949** (toll free, U.S./Can.) **+1-973-526-1800** (international)

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