


# Qplast™

## QPHJ 860A

### High Density Polyethylene

Qplast™ QPHJ 860A is a high density homopolymer resin known for its exceptional stiffness, combined with a strong balance of processability and impact resistance at low temperatures. This resin is ideally suited for applications that need high stiffness or enabling down-gauging. It also delivers superior performance in structural foam applications.

|              |  |
|--------------|--|
| Supplier     |   |
| Additive     | Antioxidant: Yes; UV Stabilizer: No  |
| Applications | <ul style="list-style-type: none"> <li>• Cases</li> <li>• Hot Fill Packaging Pails</li> <li>• Pallets</li> <li>• Totes Bins</li> <li>• Crates</li> </ul> |

#### Resin Properties

|                            | Typical Value (English) | Typical Value (SI)      | ASTM D1505 |
|----------------------------|-------------------------|-------------------------|------------|
| Density                    | 0.965 g/cm <sup>3</sup> | 0.965 g/cm <sup>3</sup> | ASTM D1505 |
| Melt Index (190°C/2.16 kg) | 8.0 g/10 min            | 8.0 g/10 min            | ASTM D1238 |
| Peak Melting Temperature   | 275 °F                  | 135 °F                  | ASTM D1238 |

#### Thermal

|   |        |       |            |
|---|--------|-------|------------|
| Deflection Temperature Under Load (DTUL)<br>at 66 psi — Unannealed  | 189 °F | 87 °C | ASTM D648  |
| Deflection Temperature Under Load (DTUL)<br>at 264 psi — Unannealed | 119 °F | 49 °C | ASTM D648B |

#### Molded Properties

|   |            |          |             |
|---|------------|----------|-------------|
| Tensile Strength at Yield                           | 4300 psi   | 30 MPa   | ASTM D638   |
| Elongation at Break                                 | 440 %      | 440 %    | ASTM D638   |
| Flexural Modulus                                    |            |          | ASTM D790B  |
| 1% Secant   | 270000 psi | 1900 MPa |             |
| 2% Secant   | 230000 psi | 1600 MPa |             |
| Environmental Stress-Crack Resistance<br>10% Igepal | 3 hr       | 3 hr     | ASTM D1693B |

|                                     |               |        |           |
|-------------------------------------|---------------|--------|-----------|
| Notched Izod Impact (-40°F (-40°C)) | 0.89 ft·lb/in | 47 J/m | ASTM D256 |
|-------------------------------------|---------------|--------|-----------|

Disclaimer

The information presented in this document is believed to be accurate as of the date of publication. However, it is provided for general informational purposes only. It does not imply any express or implied warranty or quality specification, including but not limited to warranties of merchantability or fitness for a particular purpose. Users are solely responsible for independently assessing whether the product is suitable for their intended use and ensuring that it can be used safely and in compliance with relevant laws and regulations. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document.

REV: 2024