

# Qplast™

## QPHD W502AA

### High Density Polyethylene

QPHD W502AA is a high molecular weight, high-density polyethylene copolymer. This resin has superior stress crack resistance, high impact strength and good rigidity.

Supplier



Additive

Thermal Stabilizer: Yes; Antistatic: No

Applications

- Drums
- Highway Drainage Pipe
- Thermoformed Parts
- Food Packaging
- Large Part Blow Molding
- Heavy Gauge Sheet
- Shot Gun Shells

Form(s)

Pellets

#### Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.954 g/cm <sup>3</sup>	0.954 g/cm <sup>3</sup>	ASTM D1505
Melt Index (190°C/2.16 kg)	<0.10 g/10 min	<0.10 g/10 min	ASTM D1238
High Load Melt Index (190°C/21.6 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Peak Melting Temperature	265 °F	129 °C	ASTM D1238

#### Thermal

Deflection Temperature Under Load (DTUL) at 66psi — Unannealed	151 °F	66 °C	ASTM D648
--	--------	-------	-----------

#### Molded Properties

Tensile Strength at Yield	4000 psi	28 MPa	ASTM D638
Flexural Modulus			ASTM D790
1% Secant	139000 psi	958 MPa	
2% Secant	120000 psi	820 MPa	
Environmental Stress-Crack Resistance			STM D1693B
100% Igepal	>1000 hr	>1000 hr	
Durometer Hardness (Shore D, 15 sec)	61	61	ASTM D2240

Charpy Notched Impact Strength		ISO 179/1eA	
-4°F (-20°C)	12 ft-lb/in²	25 kJ/m²	
73°F (23°C)	15 ft-lb/in²	32 kJ/m²	

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