

WORLD CONTINENTAL IMPEX

Technical Data Sheet WCI HDPE EX3

### **Product Description**

WCI HDPE EX3 is a natural-colored high-density polyethylene (HDPE) grade produced with Butene-1 as a comonomer. Classified as PE80, this material offers a balanced combination of mechanical strength, toughness, and long-term durability. It provides excellent environmental stress crack resistance (ESCR) together with good hydrostatic pressure performance and high impact strength, making it highly reliable for pressure pipe applications.

#### **Typical Applications**

- Pressure Pipe Systems (PE80 Class): Water distribution and discharge pipelines that require long-term hydrostatic strength.
- Injection Molded Fittings: Couplers, connectors, and other fittings that demand mechanical strength and durability.
- Sheets and Profiles: Industrial sheet extrusion and thermoforming applications where rigidity and impact resistance are critical.
- General Purpose Components: A variety of molded and extruded products that require good toughness, stress crack resistance, and long-term reliability.



+420 776 498 345



www.wci-polymer.com



Sales@wci-polymer.com



# WORLD CONTINENTAL IMPEX



## **Technical Specification**

Property	Value	Units
Melt Flow Rate (190°C/5kg) (190°C/21.6kg)	0.45 / 12	g/10 min
Density	0.945	g/cm³
MRS Classification	8	MPa
Hydrostatic Strength (80°C)	1000	hr
Tensile Modulus (23°C, v=1mm/min, Secant)	850	MPa
Tensile Stress at Yield (23°C, v=50mm/min)	22	MPa
Tensile Strain at Yield (23°C, v=50mm/min)	8	%
Charpy Notch Impact Strength (23°C)	12	kJ/m²
Hardness Shore D (3 Sec)	60	
Vicat Softening Temperature	67	°C



+420 776 498 345



www.wci-polymer.com



Sales@wci-polymer.com