

<u>Resin Properties</u> ⁽¹⁾	<u>Typical Value</u>	<u>ASTM Method</u>
Melt Flow Rate, g/10 min 190°C/2.16 kg	0.08	D 1238
190°C/21.6 kg (HLMI)	8.0	
Density, g/cm ³	0.945	D 792
Melting Point, °F	258	D 3417
<u>Mechanical Properties</u> ⁽¹⁾⁽²⁾		
Tensile Strength @ Yield, psi	> 3,300	D638, Type IV Specimen, 2 in/min
Elongation @ Break, %	> 800	D-638, Type IV Specimen, 2 in/min
Flexural Modulus @ 2% Strain, psi	125,000	D790
Notched Izod Impact Strength, ft-lb/in notch	11.0	D 256, 1/8 in thick specimen
Shore Hardness, D Scale	63	D 2240
ESCR ⁽³⁾ , hrs	>1,000 no failures	D 1693, cond. C, 100% Igepal
PENT ⁽⁴⁾ , hrs	> 100	F1473
<u>Pipe Properties</u>		
Hydrostatic Design Basis ⁽⁵⁾ , psi		D 2837
73°F (23°C)	1,600	
140°F (60°C)	800	
Cell Classification	345464	D 3350
PPI Recommended Designation	PE 3608, PE 3408	
<u>Processing Recommendations</u>		
Extruder Temperature Range	375 – 430 °F	
Melt Temperature During Processing	410 °F	
Vacuum Tank Water Temperature	73 °F	

Polyethylene:

High Molecular Weight
High Density Pipe Resin
(Natural)

Characteristics

- Excellent Processability
- Excellent melt strength
- NSF certified to D3350, CSA B137.1 (water) and CSA C448 (geothermal)
- NSF Standard 14/61 certification for potable water
- FDA Compliant⁽⁶⁾

Applications

- Potable water
- Geothermal
- Gas distribution
- Industrial and mining
- Sewer and sewer relining
- Gas and oil gathering
- Fiberoptic innerduct
- General pipe relining

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.
 (2) The data listed was determined on press molded specimens and may, therefore, vary from specimens taken from pipes.
 (3) Environmental Stress Crack Resistance (ESCR)
 (4) Pennsylvania Notch Tensile Test (PENT)
 (5) Blended with approved black PE masterbatch
 (6) Complies with 21 CFR § 177.1520, Para. (c) 2.1 and 2.2

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1201 Louisiana Street
Suite 1800
Houston, TX 77002

P.O. Box 674411
Houston, TX 77267-4411

Phone: (713) 483-5241
Fax: (713) 483-5252

1-800-344-3462

All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of these products must be guided by the user's own methods for selection of proper formulation. TOTAL PETROCHEMICALS USA, INC. disclaims any responsibility for misuse or misapplication of its products. TOTAL PETROCHEMICALS USA, INC. MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TOTAL PETROCHEMICALS USA, INC. liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.

