## TOTAL PETROCHEMICALS

**HDPE HP401N** 

TOTAL PETROCHEMICALS USA, INC.

Resin Properties <sup>(1)</sup> Melt Flow Rate, g/10 min 190°C/2.16 kg 190°C/21.6 kg (HLMI)	Typical Value  0.08 8.0	ASTM Method D 1238
Density, g/cm <sup>3</sup>	0.945	D 792
Melting Point, °F	258	D 3417
Mechanical Properties (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-	11.0	D 256, 1/8 in thick
lb/in notch		specimen
Shore Hardness, D Scale	63	D 2240
ESCR <sup>(3)</sup> , hrs	>1,000	D 1693, cond. C,
(1)	no failures	100% Igepal
PENT <sup>(4)</sup> , hrs	> 100	F1473
Pipe Properties		
Hydrostatic Design Basis <sup>(5)</sup> , 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</u>		
<b>Recommendations</b>		
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<sup>(6)</sup>

## **Applications**

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

- (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



<sup>(1)</sup> Data developed under laboratory conditions and are not to be used as specification, maxima or minima.

<sup>(2)</sup> The data listed was determined on press molded specimens and may, therefore, vary from specimens taken from pipes.

<sup>(3)</sup> Environmental Stress Crack Resistance (ESCR)