

Resin Properties⁽¹⁾	Typical Value	ASTM Method
Melt Flow Index, g/10 min 190°C/5 kg	0.38	D 1238
190°C/21.6 kg (HLMI)	11.0	
Density, g/cm ³	0.958	D 792
Melting Point, °F	258	D 3417
Carbon Black Content, %	2.5	D 1603
<u>Mechanical Properties⁽¹⁾⁽²⁾</u>		
Notched Izod Impact Strength, ft-lb/in	8	D 256, A 1/8 in thick specimen
Elongation @ Break, %	> 800	D-638, Type IV Specimen, 2 in/min
Tensile Strength at Yield, psi	>3,300	D 638, Type IV specimen, 2 in/min
Secant Modulus of Elasticity @ 2% strain, psi	115,000	D 638, Type IV specimen, 2 in/min
Flexural Modulus @ 2% Strain, psi	125,000	D 790
Shore Hardness, D Scale	63	D 2240
ESCR ⁽³⁾ , hrs	>5,000, no failures	D 1693, cond. C
<u>Thermal Properties⁽¹⁾⁽²⁾</u>		
Vicat Softening Temperature, °F	255	D 1525
Brittleness Temperature, °F	-180	D 746
Heat Distortion Temperature, °F	172	D 648
Thermal Expansion, in/in/°F	1×10 ⁻⁴	D 696
<u>Pipe Properties</u>		
Hydrostatic Design Basis, psi	1,600	D 2837, 73° (23°C)
Compressed Ring ESCR ⁽³⁾ , hrs 50°C/25% Igepal	>1,000, no failures	F 1248
PENT, hrs ⁽⁴⁾	>400	F 1473
Classification Type/Class/Cat./Grade	III/A/5/P34	D 1248
Cell Classification	345464C	D 3350
PPI Recommended Designation	PE 3408 ⁽⁵⁾	

Polyethylene:

High Molecular Weight
HDPE Bimodal Pipe Resin
(Black)

Characteristics

- Outstanding high temperature creep rupture strength
- Excellent compressed ring ESCR
- Field performance history since 1957⁽⁵⁾
- NSF approved⁽⁵⁾ for potable water

Applications

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

HDPE 3407B 10/04

(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) Polyethylene Notch Test (PENT)
 (5) Previously listed as Hostalen® GM 5010 T2

