

Reprocessed Plastics, Inc
 Recycled Plastics
 609 Co. Rd 82 NW
 Garfield, MN 56332
 320-834-2293 fax 320-834-2290

HDPE VIRGIN PLASTIC SHEETS

TEST	ASTM NUMBER	TYPICAL VALUE
Tensile Strength	D 638	1800 – 3000 psi
Modulus of Elasticity	D 638	50000 – 150000 psi
Elongation	D 638	5 – 50 %
Flexural Modulus	D 790	100000 – 200000 psi
Compression	D 1037	3000 – 5000 psi
Moisture Content	D 570	0 %
Water Absorption	D 570	0 %
Density	D 1895	0.92 – 1.5 g/cc
Hardness – Shore D	D 2240	50 – 108
Shear Strength	D 732	1800 – 2500 psi
Ultimate Shear Strength	D 143	500 – 600 psi
Abrasion Resistance	D 2394	0.005” – 0.015” wear/1000 revs
Self Ignition Temperature	D 1929	700 – 850 F
Flash Ignition Temperature	D 1929	650 – 750 F
Flame Spread	E 84	70 – 90
Coefficient of Linear Thermal Expansion	D 696	1.0 – 2.0 x 10 ⁻⁵ in/in/ F
Static Coefficient of Friction	D 2047	0.1 – 0.5

Notched izod impact	D 746	0.7 – No Break	lbs/in
Direct Nail Withdrawal	D 1037	40 – 60	lbs
Nail Head Pull Through	D 1037	400 – 500	lbs
Thermal Resistance	C 177	1.386	F ft h/BTU
Thermal Conductance	C 177	0.72	BTU-in/ft F
Thermal Conductivity	C 177	0.378	in/ft h F
Thermal Resistivity	C 177	2.78	ft F h/BTU
Termite Resistance	D 1761	9.6 – 9.8	rating
Modulus of Rupture	D 4761	1400 – 1600	psi
Fungus Resistance	D 1413	No Decay	
Leachate (f)	TCLP-EPA 1311	Pass	
Fungal Resistance	US Military Standard 810-D Method 508.3	No signs of visible fungal growth	
Ultra Violet Deterioration Rate		Insignificant	

- based on ½" thick material
- because of the variety of resin used in making HDPE Virgin Sheets, individual sheets may vary.