

Braskem PE GM5010T2U

High Density Polyethylene

Braskem

Message:

GM5010T2U is a High Density Polyethylene compound with high molar mass specially developed for the manufacturing of jacketing of umbilicals. It is produced with bimodal technology, shows high mechanical properties and has excellent resistance to stress cracking. GM5010T2U contains carbon black pigment that protects it against ultraviolet radiation action and photodegradation.

Application:

Jacketing of umbilicals, risers and flowlines for oil field platforms.

Process:

Extrusion.

General Information	
Additive	Carbon Black (3%)
Features	High Density
	High ESCR (Stress Crack Resist.)
	High Molecular Weight
Agency Ratings	FDA 21 CFR 177.1520
Forms	Pellets
Processing Method	Compression Molding
	Extrusion

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.955	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)	0.45	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (2.00 mm, 100% Igepal, Compression Molded, F50)	> 1000	hr	ASTM D1693
Carbon Black Content	2.3 to 2.7	%	ASTM D1603
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D, Compression Molded)	62		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
Yield, Compression Molded	23.0	MPa	
Break, Compression Molded	34.0	MPa	
Tensile Elongation			ASTM D638
Yield, Compression Molded	9.1	%	
Break, Compression Molded	800	%	
Flexural Modulus - 1% Secant (Compression Molded)	1090	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method

Notched Izod Impact (Compression Molded)	220	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa, Unannealed, Compression Molded)	70.0	°C	ASTM D648
Vicat Softening Temperature	124	°C	ASTM D1525 ¹
Oxidation Induction Time (220°C)	> 50	min	
NOTE			

1. Loading 1 (10 N)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

