



# TRB432

Polyethylene Product

## Product Description

*TRB432 is a polyethylene product suitable for piping fabrication. This material is polymerized with a Ziegler-Natta catalyst and it is designed for demanding requirements of pressure pipe applications that require excellent long-term hoop strength, superb resistance to slow crack growth and exceptional resistance to rapid crack propagation. It is used for energy & water piping systems.*

## Product Characteristic

<b>Test Method Used</b>	ASTM
<b>Features</b>	Excellent long-term hoop strength Great Crack Resistance Exceptional Resistance to rapid crack propagation
<b>Typical Customer Applications</b>	Energy Piping System      Portable Water Pipe Industrial Pipe

## Typical Properties

Physical	Test Method	Unit	Value
Melt Flow Rate (5 kg @190°C)	ASTM D1238	g/10min	0.30
Density	ASTM D1505	g/cm <sup>3</sup>	0.948
Mechanical	Test Method	Unit	Value
Tensile Strength at Yield	ASTM D638	MPa	26
Elongation at Break	ASTM D638	%	>700
Flexural Modulus	ASTM D790	MPa	1100
ESCR (Condition B, 100% Igepal, F50)	ASTM D1693	hr	>5000
Thermal	Test Method	Unit	Value
Oxidative Induction Time (OIT, 200°C)	ASTM D3895	Min	>100
Melting Temperature	ASTM D3418	°C	130

**Notes:** Results may vary depending on environmental conditions and /or devices.

## Processing Recommendation

The actual conditions depends on the type of equipment used.

## Pipe Fabrication

*TRB432 is easy to process with standard pipe fabrication machines. Following processing parameters should be used as guidelines:*

Extrusion Cylinder Temperature	180 – 220 °C
Head Temperature	190 – 220 °C
Die Temperature	190 – 220 °C
Melt Temperature	180 – 230 °C

## Storage

This material should be stored in dry conditions, protected from sunlight and at temperatures below 50 °C.

## Contact

### GS Caltex

GS Tower, 508, Nonhyeon-ro, Gangnam-gu,  
Seoul 06141, Rep of Korea  
tel.: 82 042 866 1765