

### TECHNICAL DATA SHEET

## TRICOLENE MDF12938

Medium Density Polyethylene

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ADDING A WORLD OF VALUE

#### PRODUCT DESCRIPTION

This type of MDPE is a high molecular weight copolymer of ethylene and 1-hexene

#### PROCESSING METHODS

Blown Film (Co)Extrusion

#### CHARACTERISTICS

High ESCR  
Excellent Melt Strength  
Good Processability

#### APPLICATIONS

Geomembrane Applications:  
Landfill Liners  
Mine Tailing Collection projects

#### RESIN PROPERTIES

**Melt Flow Rate** 2.16 kg/190 °C MFR<sub>2</sub>  
**Melt Flow Rate** 21.60 kg/190 °C HLMFR  
**Density** 23 °C  
**Antioxidant Package**

#### TEST METHOD

ASTM D1238  
ASTM D1240  
ASTM D1505  
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#### VALUES, ENGLISH UNITS

0.08 g/10 min  
12.00 g/10 min  
0.938 g/cm<sup>3</sup>  
Yes

#### VALUES, INTERNATIONAL UNITS

0.08 g/10 min  
12.00 g/10 min  
0.938 g/cm<sup>3</sup>  
Yes

#### MECHANICAL PROPERTIES

**Tensile Strength at Yield**  
2,0 in/min (50,8 mm/min), Type IV compression molded plaque  
**Tensile Elongation at Yield**  
2,0 in/min (50,8 mm/min), Placa IV por Compresion  
**Tensile Elongation at Break**  
2,0 in/min (50,8 mm/min), Placa IV por Compresion  
**Flexural Modulus**  
Initial Tangente - 0,051 in/min (1,3 mm/min)  
**Tensile Impact Strength**  
23 °C, Type S bar, 23 °C  
**Shore Hardness**  
Escala D, 15 s

#### TEST METHOD

ASTM D638  
ASTM D638  
ASTM D638  
ASTM D790A  
ASTM D1822  
ASTM D224C

#### VALUES, ENGLISH UNITS

2,600 psi  
--- %  
850 %  
120,000 psi  
240 ft-lbf/in<sup>2</sup>  
65.0

#### VALUES, INTERNATIONAL UNITS

18 MPa  
--- %  
850 %  
828 MPa  
504 kJ/m<sup>2</sup>  
65.0

#### OTHER PROPERTIES

**Vicat Softening Temperature - VST**  
10 N (1 kg), 50 °C/h  
**Heat Deflection Temperature - HDT**  
66 psi (0,455 MPa), Method A  
**Environmental Stress Crack Resistance - ESCR**  
Condition B: 100 % Igepal at 50 °C, F50  
Condition B: 10 % Igepal at 50 °C, F50

#### TEST METHOD

ASTM D1525  
ASTM D648  
ASTM D1693

#### VALUES, ENGLISH UNITS

243 °F  
138 °F  
> 1500 h  
> 1500 h

#### VALUES, INTERNATIONAL UNITS

117 °C  
59 °C  
> 1500 h  
> 1500 h

The data presented here is true and accurate to the best of our knowledge. Likewise, the values are nominal and should not be taken as minimum or maximum specifications. No warranty, express or implied, is made regarding resin performance. The customer must validate these properties according to his own evaluations on his machine and in his laboratory.

#### REGULATORY COMPLIANCE

This resin complies with the following FDA regulation: 21 CFR 177.1520: Olefinic Polymers. This regulation describes polyolefin resins that can be used safely for food packaging and preservation at low temperatures and at ambient temperatures. This resin is not designed for use in medical applications and should not be used in such applications.

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**FLEXIBLE**

