

# Marlex® 9018

High Density Polyethylene

Chevron Phillips Chemical Company LLC

# PROSPECTOR®

www.ulprospector.com

## Technical Data

### Product Description

Marlex® 9018 is a High Density Polyethylene material. It is available in Europe, Latin America, or North America for injection molding.

Important attributes of Marlex® 9018 are:

- Eco-Friendly/Green
- Food Contact Acceptable
- Good Stiffness
- Hexene Comonomer
- Impact Resistant

Typical applications include:

- Containers
- Automotive
- Caps/Lids/Closures
- Consumer Goods
- Food Contact Applications

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Processing - Injection (English)</a> • <a href="#">Technical Datasheet (English)</a>
Search for UL Yellow Card	• <a href="#">Chevron Phillips Chemical Company LLC</a> • <a href="#">Marlex®</a>
Availability	• Europe • Latin America • North America
Features	• Durable • Good Impact Resistance • Food Contact Acceptable • Good Stiffness • Recyclable Material • Good Flow • Hexene Comonomer
Uses	• Automotive Applications • Containers • Pails • Caps • Household Goods • Toys
Agency Ratings	• ASTM D 4976-PE232 • FDA 21 CFR 177.1520(c) 3.2a
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density	0.952 g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	20 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance 100% Igepal, Compression Molded, F50	< 10.0 hr	ASTM D1693B

Mechanical	Nominal Value Unit	Test Method
Tensile Strength <sup>3</sup> (Yield, Compression Molded)	27.0 MPa	ASTM D638
Tensile Elongation <sup>3</sup> Break, Compression Molded	300 %	ASTM D638
Flexural Modulus - Tangent <sup>4</sup> (Compression Molded)	1200 MPa	ASTM D790

Hardness	Nominal Value Unit	Test Method
Durometer Hardness Shore D, Compression Molded	63	ASTM D2240

Thermal	Nominal Value Unit	Test Method
Brittleness Temperature	< -75.0 °C	ASTM D746A
Vicat Softening Temperature	122 °C	ASTM D1525 <sup>5</sup>



**Notes**

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> Type IV, 51 mm/min

<sup>4</sup> 13 mm/min

<sup>5</sup> Rate A (50°C/h), Loading 1 (10 N)



## Marlex® 9018

High Density Polyethylene

Chevron Phillips Chemical Company LLC

# PROSPECTOR®

www.ulprospector.com

### Where to Buy

#### Supplier

##### Chevron Phillips Chemical Company LLC

The Woodlands, TX USA

Telephone: 800-231-1212

Web: <http://www.cpchem.com/>

#### Distributor

##### Amco Polymers

Telephone: 800-262-6685

Web: <http://www.amcopolymers.com/>

Availability: North America

##### Biesterfeld Plastic GmbH

*Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH for availability of individual products by country.*

Telephone: +49-40-32008-0

Web: <http://www.biesterfeld-plastic.com/>

Availability: Denmark, Faroe Islands, Finland, Iceland, Norway, Sweden, United Kingdom

##### M. Holland Canada Company

Telephone: 905-665-1168

Web: <http://www.mholland.com/>

Availability: Canada

##### M. Holland Company

Telephone: 855-497-1403

Web: <http://www.mholland.com/>

Availability: Mexico, United States

##### PolyOne Distribution

*PolyOne Distribution is a global distribution company. Contact PolyOne Distribution for availability of individual products by country.*

Telephone: 800-894-4266

Web: <http://polyonedistribution.com/>

Availability: Global

