

# Formolene® E602

High Density (HMW) Polyethylene

Formosa Plastics Corporation, U.S.A.

## Technical Data

### Product Description

High Density Polyethylene High Molecular Weight Bi-Modal Resin for Non-Pressure Pipe Extrusion Applications

Formolene® E602 is a high performance copolymer that is designed for the most demanding requirements of corrugated pipe applications.

Formolene® E602 meets the requirements of the PPI third party certification program for use in AASHTO M294 corrugated pipe.

Formolene® E602 has a cell class of 436460/446460 per ASTM D3350-05.

### General

|                           |                                                                                        |                                                  |
|---------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------|
| Material Status           | • Commercial: Active                                                                   |                                                  |
| Literature <sup>1</sup>   | • <a href="#">Technical Datasheet (English)</a>                                        |                                                  |
| Search for UL Yellow Card | • <a href="#">Formosa Plastics Corporation, U.S.A.</a><br>• <a href="#">Formolene®</a> |                                                  |
| Availability              | • North America                                                                        |                                                  |
| Features                  | • Copolymer                                                                            | • High Molecular Weight                          |
| Uses                      | • Agricultural Applications<br>• Corrugated Pipe                                       | • Piping<br>• Plumbing Parts                     |
| Agency Ratings            | • AASHTO M294<br>• ASTM D 3350 PE438460                                                | • ASTM D 3350 PE446460<br>• EC 1907/2006 (REACH) |
| Forms                     | • Pellets                                                                              |                                                  |
| Processing Method         | • Pipe Extrusion                                                                       |                                                  |

| Physical                                                  | Nominal Value Unit      | Test Method |
|-----------------------------------------------------------|-------------------------|-------------|
| Density                                                   | 0.953 g/cm <sup>3</sup> | ASTM D1505  |
| Melt Mass-Flow Rate (MFR)                                 |                         | ASTM D1238  |
| 190°C/2.16 kg                                             | 0.15 g/10 min           |             |
| 190°C/21.6 kg                                             | 21 g/10 min             |             |
| Environmental Stress-Cracking Resistance                  |                         |             |
| Compression Molded <sup>3</sup>                           | > 24.0 hr               | ASTM F2136  |
| 100% Igepal, Compression Molded, F50                      | > 150 hr                | ASTM D1693B |
| Mechanical                                                | Nominal Value Unit      | Test Method |
| Tensile Strength <sup>4</sup> (Yield, Compression Molded) | 26.9 MPa                | ASTM D638   |
| Tensile Elongation <sup>4</sup>                           |                         | ASTM D638   |
| Break, Compression Molded                                 | > 600 %                 |             |
| Flexural Modulus (Compression Molded)                     | 1240 MPa                | ASTM D790   |
| Thermal                                                   | Nominal Value Unit      | Test Method |
| Brittleness Temperature <sup>5</sup>                      | < -90.0 °C              | ASTM D746   |

### 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> NCLS

<sup>4</sup> Type IV, 51 mm/min

<sup>5</sup> Compression Molded