



## TECHNICAL DATA SHEET

# HYPERENE HD-614

### Hexene Copolymer HDPE Rotational Moulding Powder

#### PRODUCT DESCRIPTION

Hyprene HD-614 is a specially formulated Hexene Comonomer based High Density Polyethylene designed for demanding applications like Automotive Fuel Tanks, Hydrogen Liner Tanks, Chemical Tanks & Underground Tank Systems. The grade offers exceptional balance of mouldability, high density and low temperature impact performance and also meets the international standards for Diesel Fuel Tanks.

| PROPERTY                                        | TEST METHOD <sup>1</sup> | UNIT              | TYPICAL VALUE <sup>2</sup> |
|-------------------------------------------------|--------------------------|-------------------|----------------------------|
| Density                                         | ASTM D 1505              | g/cm <sup>3</sup> | 0.952                      |
| Melt Flow Index (MFI) <sup>3</sup>              | ASTM D 1238              | g/10 min          | 4.2                        |
| Tensile Strength Yield                          | ASTM D 790               | MPa               | 22.4                       |
| Tensile Modulus                                 | ASTM D 790               | MPa               | 1337                       |
| Elongation at Break <sup>4</sup>                | ASTM D 790               | %                 | 94                         |
| Flexural Modulus <sup>5</sup>                   | ASTM D 790               | MPa               | 869                        |
| Impact Strength (4.0 mm) <sup>6</sup>           | ARM                      | ft.lbs            | 89                         |
| ESCR F <sub>50</sub> <sup>7</sup> (10% IGEPAL)  | ASTM D 1693              | h (F50)           | 140                        |
| ESCR F <sub>50</sub> <sup>7</sup> (100% IGEPAL) | ASTM D 1693              | h (F50)           | 864                        |

DENSITY 0.952

MELT INDEX 4.2

#### KEY FEATURES

Superior mechanical properties  
Improved dimensional stability  
Easy Processing

#### TYPICAL APPLICATIONS

Large Storage Tanks  
Underground tanks  
Septic Tanks  
Chemical Tanks  
Kayaks & Boats  
Boat Docks  
Solar Floats

<sup>1</sup> Properties designated have been determined using methods which are in accordance with the specified testing standards.

<sup>2</sup> Typical Values represent average laboratory values for the base resin and are intended as guides only, not as specifications.

<sup>3</sup> Condition 190°C/2.16 kg.

<sup>4</sup> ASTM Type 1, 50 mm per minute test speed, 4.0 mm thickness rotomoulded samples.

<sup>5</sup> 2% Secant using rotomoulded samples. (SPEED?)

<sup>6</sup> -40°C on rotomoulded samples.

<sup>7</sup> Condition A, 50°C, F50 values using rotomoulded specimens.

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