

# ADVANCENE™ EM-6308-UV

## High Density Polyethylene Resin

### Overview:

ADVANCENEW EM-6308-UV High Density Polyethylene (HDPE) Resin is a narrow molecular weight distribution high density homopolymer designed to offer excellent stiffness, low warpage, good toughness, and good moldability. This resin is ideally suited for injection molding applications requiring high rigidity and high modulus.

### Applications:

- Crates
- Cases
- Trays
- Tote bins
- Pallets

### Additives:

Thermal and UV Stabilizers are included.

### Complies with:

- Europe EU 10/2011 followed by its amended.
- U.S. FDA 21 CFR 177.1520(c)3.1a.

Physical Properties	Nominal Value (SI)	Test Method
Density	0.963 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	8.3 g/10min	ASTM D1238, ISO 1133
Environmental Stress-Cracking Resistance (50°C, 100% Igepal, F50)	2 Hours	ASTM D1693 <sup>1</sup>
Mechanical Properties	Typical Value (SI)	Test Method
Tensile Strength at Yield	31.0 MPa	ASTM D638 <sup>1</sup> , ISO 527
Tensile Strength at Break	17.9 MPa	
Elongation at Yield	6.0 %	
Elongation at Break	350 %	
Flexural Modulus 2 % Secant	1410 MPa	ASTM D790B <sup>1</sup> , ISO 178
Tensile Impact strength	168 KJ/m <sup>2</sup>	ASTM D1822 <sup>1,2</sup> , ISO 8256
Durometer Hardness (Shore D)	61.0	ASTM D2240 <sup>1</sup> , ISO/IEC 17025:1999
Thermal Properties	Nominal Value (SI)	Test Method
Brittleness Temperature	<-76 °C	ASTM D746 <sup>1</sup> , ISO-974 (E)
Deflection Temperature under load 66 psi (0.45 MPa), Unannealed	84 °C	ASTM D648 <sup>1</sup> , ISO 75
Vicat Softening Temperature	131 °C	ASTM D1525, ISO 306
Melting Temperature (DSC)	133 °C	ASTM D3418, ISO 3146
Peak Crystallization Temperature (DSC)	120 °C	

### Processing Conditions

- Screw speed = 20 – 50 rpm.
- Temperature setting from 190°C - 250°C.

**Notes:**

1 Molded and tested in accordance with ASTM D4976

2 Type S

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

**Availability:**

This product is supplied in 25 kg bags in secured pallets of 60 bags (1.500 MT net). It is also supplied in jumbo bags of 1000 kg capacity.

**Storage:**

The product should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product. More information on storage can be found on the Safety Information Sheet for this product.

**Safety:**

The product is not classified as a hazardous mixture.

Dust and fines from the product carry a risk of dust explosion. All equipment should be properly earthed. Inhalation of dust should be avoided as it may cause irritation of the respiratory system. Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

A Safety Information Sheet is available on request. Please contact your ETHYDCO representative for more details on various aspects of safety, recovery and disposal of the product.

**Recycling:**

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

**Related documents:**

Most datasheets and statements are available on ETHYDCO website [www.ethydc0-eg.com](http://www.ethydc0-eg.com). If more information is required, please contact an ETHYDCO representative for information.

**Disclaimer:**

**The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications**

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