

ADVANCENE™ EM-3405-UVH

Medium Density Polyethylene Resin

Overview:

ADVANCENE™ EM-3405-UVH Medium Density Polyethylene (MDPE) resin is a hexene copolymer with narrow molecular weight distribution and produced using advanced gas phase PE process. This resin is intended for use in rotational molding applications.

Applications:

- Large Industrial Tanks.
- Chemical Shipping Drums
- General UV stabilized rotomolding applications
- Trash Containers.
- Storage Containers.
- Chemical Tanks

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	0.936 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	5.0 g/10min	ASTM D1238, ISO 1133
Environmental Stress-Cracking Resistance (50°C, 100% Igepal, F50)	>1000 Hours	ASTM D1693 ¹
Mechanical Properties	Typical Value (SI)	Test Method
Tensile Strength at Yield	16.0 MPa	ASTM D638
Tensile Strength at Break	24.0 MPa	
Elongation at Break	900 %	
Flexural Modulus 1% Secant	650 MPa	ASTM D790B ¹ , ISO 178
Flexural Modulus 2% Secant	550 MPa	
Charpy Impact strength	4.61 KJ/m ²	ISO 179
Tensile Impact strength	85 KJ/m ²	ASTM D1822
Thermal Properties	Nominal Value (SI)	Test Method
Brittleness Temperature	< -100 °C	ASTM D746, ISO-974 (E)
Vicat Softening Temperature	114 °C	ISO 306

Processing Conditions

- Oven Temperature 250–300°C
- Mold Temperature 160-210°C
- Heating Time 10–20 minutes
- Primary Rotation Speed 6–12 rpm
- Secondary Rotation Speed 2–4 rpm

Notes:

1 1.9 mm specimen, slit

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. 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

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

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