

ADVANCENE™ EE-4811-AAH

High Density Polyethylene Resin

Overview:

ADVANCENE™ EE-4811-AAH High Density Polyethylene Resin is a high molecular weight, high-density polyethylene copolymer that has been designed specifically for tubular film extrusion. Its broad molecular weight distribution and density successfully combine excellent performance at high extrusion rates with high film strength and rigidity. The excellent drawdown characteristic of this product permits production of high-quality thin films. The combination of strength and drawdown makes this resin ideal for downgauging in many applications. Films are readily treated and printed to give high-quality graphics.

ADVANCENE™ EE-4811-AAH Resin is compatible with color concentrates, thus permitting the production of a variety of colored films that serve as protective and attractive decorative wraps.

Applications:

- High strength grocery sacks
- Shopping bags
- High density film
- Notion and Millinery bags.
- Multiwall sack liners
- Blown Film.
- Food Packaging.
- Freezer Film.
- Heavy Duty Bags.
- Industrial Liners.
- Industrial Packaging.
- Lamination Film.
- Multilayer Packaging Film.
- Packaging Films.
- Produce Bags
- Refuse Bags.
- Trash Bags

Additives:

- Thermal Stabilizer

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	0.948 g/cm ³	ASTM D792
Melt Index (190°C/21.6 kg)	11 g/10min	ASTM D1238, ISO 1133
Film Mechanical Properties	Nominal Value (SI)	Test Method
Film Puncture Energy	1.20 J	UNIVATION Method
Tensile Strength at Yield MD	27.6 MPa	ASTM D882
Tensile Strength at Yield TD	24.1 MPa	
Tensile Strength at Break MD	55.2 MPa	
Tensile Strength at Break TD	53.8 MPa	
Elongation at Break MD	270 %	
Elongation at Break TD	350 %	
Flexural Modulus - 1% Secant	814 MPa	ASTM D790, ISO 178
Dart Drop Impact	150 g	ASTM D1709A, ISO 7765
Elmendorf Tear Strength MD	70 g	ASTM 1922 ¹ , ISO 6383-2
Elmendorf Tear Strength TD	150 g	
Thermal Properties	Nominal Value (SI)	Test Method
Vicat Softening Temperature	124 °C	ASTM D1525, ISO 306

Melting Temperature (DSC)	132 °C	ASTM D3418, ISO 3146
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Processing conditions

- Screw speed = 80 RPM.
- BUR = 4:1.
- Temperature setting from 200°C - 215°C.

Notes:

1. Method B

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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It is the customer's responsibility to inspect and test our products in order to satisfy them with the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

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