

## ADVANCENE™ EM-3914-AAH

### Medium Density Polyethylene Resin

#### Overview:

ADVANCENE™ EE-3914-AAH MDPE resin is a hexene based medium density polyethylene with a broad molecular weight distribution and characterized by overall balance of processability, toughness, strength and good impact strength and tear properties. ADVANCENE™ EE-3914-AAH exhibits good draw down characteristics producing film with a reliable balance of extrusion ease and toughness. It also has utility as a blending component to modify and improve the physical properties for outdoor applications. A carbon black masterbatch has been found to offer suitable UV resistance.

#### Applications:

- Geomembranes
- Shopping bags
- Blends
- Notion and Millinery bags.
- Mailer bags
- Blown film
- Industrial liners
- Industrial packaging
- Produce bags
- Merchant bags
- Trash bags
- Thin-wall micro irrigation tape applications.

#### 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	0.939 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/21.6 kg)	14.0 g/10min	ASTM D1238, ISO 1133
Films Mechanical Properties	Nominal Value (SI)	Test Method
Tensile Strength at Yield MD	21 MPa	ASTM D882
Tensile Strength at Yield TD	23 MPa	
Tensile Strength at Break MD	35 MPa	
Tensile Strength at Break TD	27 MPa	
Elongation at Break MD	500 %	
Elongation at Break TD	600 %	
Flexural Modulus - Tangent	760 MPa	ASTM D790
Dart Drop Impact	165 g	ASTM 1709A, ISO 7765
Elmendorf Tear Strength MD	30 g	ASTM D1922
Elmendorf Tear Strength TD	350 g	
Thermal Properties	Nominal Value (SI)	Test Method
Brittleness Temperature	<-75 °C	ASTM D746

#### Processing Conditions

- Screw speed = 40–70 RPM.
- BUR = 2.5:1 to 4:1.
- Temperature setting from 190°C - 220°C.

**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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