

## ADVANCENE™ bEE-4906-AAH

*Bimodal High Molecular weight  
High Density Polyethylene Resin*

### Overview:

ADVANCENE™ bEE-4906-AAH is a thermally stabilized bimodal high molecular weight high density polyethylene - hexene copolymer, produced using advanced gas phase PE process in a single reactor.

### Applications:

- Solid and structured HDPE pipes,
- Conduit
- Profile extrusion applications.

### Complies with:

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

### Additives:

- Thermal Stabilizer

Physical Properties	Nominal Value (SI)	Test Method
Density	0.949 g/cm <sup>3</sup>	ASTM D1505
Melt Index (190°C/5 kg)	0.2 g/10min	ASTM D1238, ISO 1133
Melt Index (190°C/21.6 kg)	6.0 g/10min	
Mechanical Properties	Nominal Value (SI)	Test Method
Tensile Strength at Yield	24 MPa	ASTM D638 <sup>1</sup> , ISO 527
Tensile Strength at Break	26 MPa	
Tensile Elongation at Break	500 %	
Flexural Modulus – 2% Secant	1000 MPa	ASTM D790B <sup>1</sup> , ISO 178
Thermal Properties	Nominal Value (SI)	Test Method
OIT (at 210°C)	> 20 min	ISO 11357-6

### Pipe Extrusion Conditions

Typical extruders have (cooled) grooved barrels and barrier screws with an LD ratio of ca 30. Pellets should be dried to below 300 ppm moisture before use.

Temperature profile:

- Barrel temperatures: 190 – 210°C.
- Head and Die temperatures: 200 – 215°C.
- Melt temperature: 200 – 220°C.

**Notes:**

1 Molded and tested in accordance with ASTM D4976

**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.

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**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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