

# PRODUCT DATA SHEET

MFR 10  
 Density 947 **ETILINAS HD 5301AA**

## High Density Polyethylene Blow Film Applications

### DESCRIPTION

**ETILINAS HD5301AA** is a high molecular weight pelletised high density polyethylene which is suitable for a wide variety of film applications. **ETILINAS HD5301AA** meets the United State Food and Drug Administration (US FDA) criteria fo food contact use as specified in CFR 177.1520 (c) 3.1a & 3.2a and Commission Regulation (EU) No. 10/2011.

### CHARACTERISTICS include:

- Excellent impact and toughness properties
- High stiffness

### APPLICATIONS include:

- Carrier bags
- Industrial packaging
- Retort pouch
- Food packaging

Product Properties	Test Method	Units	Value
<b>General Properties</b>			
Melt Flow Rate, I <sub>2</sub>	ISO 1133 : Condition 4 @ 190°C, 2.16kg	g/10min	0.1
Melt Flow, I <sub>21</sub>	ISO 1133 : Condition 4 @ 190°C, 21.6kg	g/10min	10
Nominal Density	ISO 1183	kg/m <sup>3</sup>	947
Melting Point	ISO 3146	°C	132
Vicat Softening Point	ISO 306	°C	127
<b>Mechanical Properties</b>			
Tensile Strength at Yield (MD/TD)	ISO 527-3, speed 1	MPa	35/30
Tensile Strength at Break (MD/TD)	ISO 527-3, speed 1	MPa	60/50
Elongation at Break (MD/TD)	ISO 527-3, speed 1	%	460/950
Elmendorf Tear Strength (MD/TD)	ISO 6383/2	g/25µm	11/180
Dart Impact Strength	ISO 7765-1, (A	g/µm	140

\*The physical properties shown are typical values obtained by averaging a number of test results and small divergence from quoted figures may occur.

## Typical Processing Conditions

Recommended melt temperature between 190°C to 230°C and blow up ratio from 3 to 5 with die gap 1.2mm to 1.5mm and frostline height of minimum 8 times of the die diameter.

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### SPECIFICATIONS

ETILINAS HD 5301AA complies with the following specification when processed using good extrusion practice:-

- FDA Regulation 21 CFR 177.1520
- Commission Regulation (EU) No. 10/2011.
- HALAL certified, JAKIM/(S)/(22.00)/492/2/1 011-03/2011.

### AVAILABILITY

ETILINAS HD 5301AA are available in 25kg bag and bulk bag. The product type and batch number are clearly marked on each bag.

### STORAGE/HANDLING

ETILINAS HD 5301AA should be properly stored in well ventilated environment at a temperature of below 50°C. Prolonged or improper storage can result in deterioration of product properties. The PETRONAS Chemicals Safety Data Sheet (SDS) contains important safety information and should be viewed before using the product.

### HEALTH & SAFETY

ETILINAS HD 5301AA is not classified as a dangerous preparation. Please refer to our Safety Data Sheet (SDS) for details on various aspects of safety, recovery and disposal of the product.

### PRODUCT STEWARDSHIP

PCGB has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. Our Product Stewardship program rests with each and every individual involved with PCGB's products– from the initial concept and research, to manufacture, use, sale and disposal of each product.

### RELATED DOCUMENTS

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

Safety Data Sheet (SDS)  
Statement on chemicals, regulations and standards  
Statement on compliance to food contact regulations

### FOR MORE INFORMATION

Please contact **PETRONAS Chemicals Group Berhad (PCGB)**, Level 15, Tower 1, PETRONAS TWIN TOWER, KLCC, 50088 KUALA LUMPUR, MALAYSIA.

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MS ISO 9001:2008 REG NO: 3349



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