

# PRODUCT DATA SHEET



MFR 10  
Density 950 **ETILINAS HD5201AA**

## High Density Polyethylene Blow Moulding Applications

### DESCRIPTION

**ETILINAS HD5201AA** is a high density polyethylene (HDPE) with hexene copolymer, supplied in pellet form, which has an optimum balance properties for use in a wide range of blow moulding and extrusion applications. It meets the United States Food and Drug Administration (US FDA) criteria for food contact use as specified in 21 CFR 177.1520 (c) 3.1a & 3.2a and Commission Regulation (EU) No. 10/2011.

### CHARACTERISTICS include:

- Easy processing
- Good rigidity
- Excellent environmental stress cracking resistance
- High impact strength
- High melt strength

### APPLICATIONS include:

- High performance blow moulded containers from 5 litres and up to 200 litres capacity for Household, Industrial and Chemicals (HIC) containers.

Product Properties*	Test Method	Units	Value
<b>General Properties</b>			
Melt Flow Rate, I <sub>5</sub>	ASTM D 1238 @ 190°C, 5.0kg	g/10min	0.45
Melt Flow Rate, I <sub>21</sub>	ASTM D 1238 @ 190°C, 21.6kg	g/10min	10.0
Nominal Density	ASTM D 1505	kg/m <sup>3</sup>	950
Melting Point	ISO 3146	°C	132
Vicat Softening Point	ISO 306	°C	127
<b>Mechanical Properties</b>			
Tensile Strength at Yield	ASTM D 638, 50mm/min, Type IV	MPa	30
Elongation at Break	ASTM D 638, 50mm/min, Type IV	%	700
Young Modulus	ASTM D 638, 50mm/min, Type IV	MPa	400
Flexural Modulus	ASTM D 790	MPa	1100
Charpy Impact Strength	ISO 179, Type 1, Notch A	kJ/m <sup>2</sup>	17
Heat Deflection Temperature	ASTM D 648, Method B	°C	68
Vicat Softening Temperature	ASTM D 1525, Load: 1kg; Heating rate: 50°C/hr	°C	128
ESCR, Cond. B, F <sub>50</sub>	ASTM D 1693, 100% Igepal	hrs	>1000

\*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 is in the range of 170°C to 210°C depending on the type of machine.

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### REGULATORY

ETILINAS HD5201AA complies with the following specification when processed using good extrusion practice:-

- US FDA Regulation 21 CFR 177.1520 and CFR 178.2010.
- Commission Regulation (EU) No. 10/2011.
- HALAL certified.
- REACH, RoHS and SVHC.

### AVAILABILITY

ETILINAS HD5201AA are available in 25kg bags. The product grade and batch number are clearly marked on each bag.

### STORAGE/HANDLING

ETILINAS HD5201AA should be properly stored in well ventilated environment. 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 HD5201AA 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

PETRONAS aims to increase awareness of all the hazards associated with the storage, handling and use of its products. Thoroughly reviewing the accompanying Safety Data Sheets and disseminating the information to all dependent and interested parties is an essential part of any 'Responsible Care' programme.

### 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)**, Tower 1, PETRONAS Twin Towers, Kuala Lumpur City Centre, 50088 Kuala Lumpur, Malaysia.

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CERTIFIED TO ISO 9001:2015  
CERT. NO. : AR1560



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