



**New Texpa Machinery Industry
& Trade Co. LTD**

New Texpa Machinery Industry & Trade Co. LTD
Zafer Mah, Mah. Dogan Arasli BLV.
Ozyurtlar rezidans No: 97-99
Daire: 109 Esenyurt/Istanbul
Tel. +90 532 565 9045
Fax +90 212 924 2805
info@texpamachinery.eu

Product Data Sheet

HBM 4261A

High Density Polyethylene

Product Description

HBM 4261A is a high molecular weight, high-density polyethylene with broad molecular weight distribution specially developed for producing automotive fuel tank. This grade, which is produced by 1-hexene co-monomer, offers a very good creep strength, good process-ability, excellent environmental stress cracking resistance (ESCR) and stiffness. HBM 4261A has been manufactured under Basell license.

General Information

Status	Commercial: Active	
Application	Automotive fuel tank, Non-fuel reservoirs	
Form(s)	Pellet	
Attribute	Outstanding ESCR Very Good Creep Strength Good Chemical Resistance	High Impact Resistance Excellent Process-ability Excellent Low Temp. Impact Resistance
Additives	Antioxidant: Yes Processing Aid: No	Anti-block: No Slip Agent: No



**New Texpa Machinery Industry
& Trade Co. LTD**

New Texpa Machinery Industry & Trade Co. LTD
 Zafer Mah, Mah. Dogan Arasli BLV.
 Ozyurtlar rezidans No: 97-99
 Daire: 109 Esenyurt/Istanbul
 Tel. +90 532 565 9045
 Fax +90 212 924 2805
 info@texpamachinery.eu

Typical Properties	Typical Value ¹	Unit	Test Method
Physical			
High Load Melt Flow Index (190°C/ 21.6 kg)	5.6	g/10 min	ISO 1133
Density ²	0.947	g/cm ³	ISO 1183
Bulk Density	> 0.50	g/cm ³	ISO 60
Mechanical ³			
Tensile Strength at Yield	25	MPa	ISO 527-1, -2
Tensile Strength at Break	45	MPa	ISO 527-1, -2
Elongation at Yield	10	%	ISO 527-1, -2
Elongation at Break	> 1200	%	ISO 527-1, -2
Tensile Modulus of Elasticity	800	MPa	ISO 527-1, -2
Flexural Modulus - 1% Secant	> 800	MPa	ASTM D790
SCR F ₁₀ (10% Igepal, Method B)	> 2000	hr	ASTM D1693
FNCT (3.5 MPa, 2% Arkopal N100, 80°C)	> 80	hr	ISO 16770
Impact			
Tensile Impact Strength (Notched, Type 1, Method A, - 30°C)	167	kJ/m ²	ISO 8256
Izod Impact Strength (Notched, Method A, 23°C)	kJ/m ²	ISO 180	
Thermal			
Melting Temperature	130	°C	ISO 3146
Oxidation Induction Time (200°C)	> 50	min	ISO 11357
Vicat Softening Temperature (Method A/ 10N)	126	°C	ISO 306
Deflection Temperature Under Load (0.45 MPa)	68	°C	ISO 75
Deflection Temperature Under Load (1.8 MPa)	50	°C	ISO 75

Recommended Process Conditions ⁴

Processing Method: Extrusion Blow Molding; Thermoforming

Extruder Barrel Temperature: 200-230 °C

Melt Temperature: 205-240 °C

1. Typical values: these are not to be construed as specifications.
2. The density parameter was determined on compression-molded specimens, which were prepared in accordance with procedure C of ASTM D4703, Annex A1.
3. Properties are based on compression-molded specimens, which were prepared in accordance with procedure B of ASTM D4703, Annex A1, using 100% HBM 4261A resin.
4. Please note that, these processing conditions are recommended by manufacturer only for 100% HBM 4261A resin (not in the case of blending with any other compatible material), therefore because of the many particular factors which are outside our current knowledge and control and may affect the use of product, no warranty is given for the foregoing data. Moreover, the specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.