Arena Petro Gas

Producer and Supplier in the fields of Chemical ,Oil ,Gas and Petrochemical industries

DATE: 2024-2025
Arena Code: AS10330/ASPC-HBM 5510

Technical Data Sheet

HBM 5510

High Density Polyethylene

HBM5510 is a high density polyethylene, specially developed for large blow molding parts. This grade offer high stiffness, good processability and good ESCR. HBM5510 has been manufactured under Basell license.

Applications:

-Large blow molding parts, standard and lightweight Jerry cans

Arena Petro Gas
Head Office:
Head Office: Unit 1011, 10th Floor, Kian Center 2 , Janbaz Blvd, Mashhad, Iran
Postal Code : 9197810030
Tell:+98-51-3883 9090
Fax:+98-51-3883 9010
Mobile: +98 915 005 1050
Website: www.arena-petrogas.com
E-mail: info@arena-petrogas.com

Arena Petro Gas

Producer and Supplier in the fields of Chemical ,Oil ,Gas and Petrochemical industries

DATE: 2024-2025
Arena Code: AS10330/ASPC-HBM 5510

Technical Data Sheet

Typical Properties	Typical Value[1]	Units	Test Method
Physical			
High Load Melt Flow Index(190℃/21.6kg)	10	g/10 min	ISO 1133
Melt Flow Index (190℃/ 5 kg)	0.50	g/10 min	ISO 1133
Density[2]	0.955	gr/cm3	ISO 1183
Bulk Density	>0.50	gr/cm3	ISO 60
Mechanical[3]			
Tensile Modulus of Elasticity	1000	MPa	ISO527-1;2
Flexural Modulus - 1% Secant	1000	MPa	ASTM D790
Tensile Stress at Yield	27	MPa	ISO527-1;2
Tensile Strain at Yield	8	%	ISO527-1;2
Tensile Stress at Break	43	KJ/m2	ISO527-1;2
Ball Indentation Hardness(H 132/30)	49	MPa	ISO 2039-1
ESCR	110	hrs	ASTM D1693
Impact			
Tensile Impact Strength (Notched, Type 1, Method A, -30℃)	135	KJ/m2	ISO 8256
Izod Impact Strength (Notched, Method A, 23 ℃)	22	KJ/m2	ISO 180
Thermal			
Vicat Softening Temperature (Method A/ 10N)	127	℃	ISO 306
Deflection Temperature Under Load (1.8 MPa)	45	℃	ISO 75
Recommended Process Conditions[4]			
Extruder Barrel Temperature: 180-220 °C	**Melt Temperature: 200-235 °C**		

1. Typical values: these are not to be construed as specification.
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% HBM5510 resin.
4. Please note that these processing conditions are recommended by manufacturer only for 100% HBM5510 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. Also, the specific recommendations for resin type and the processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Arena Petro Gas
Head Office:
Head Office: Unit 1011, 10th Floor, Kian Center 2 , Janbaz Blvd, Mashhad, Iran
Postal Code : 9197810030
Tell:+98-51-3883 9090
Fax:+98-51-3883 9010
Mobile: +98 915 005 1050
Website: www.arena-petrogas.com
E-mail: info@arena-petrogas.com