

Persian Gulf Petrochemical Industry Commercial Co.

Arya Sasol Petrochemical Company



Polymers



Chemical &  
Aromatics



Fuel & Feeds  
Stock

# HDPE (HCH 5020)

Physical Properties	UNIT	Value	TEST METHOD
Density (23 oC)	Kg/m3	950	ISO 1183
MFI (190 oC /21.6Kg)	dg/min	22	ISO 1133
MFI (190 oC /2.16Kg)	dg/min	0.3	ISO 1133
Bulk Density	g/cm3	>0.50	ISO 1133
Mechanical properties			
Tensile Modulus of elasticity	MPa	1000	ISO527-1
Tensile stress at Yield	MPa	25	ISO 527-1
Tensile strain Yield	%	9	ISO 527-1
Notched Tensile impact strength(-30 oC)	kJ/m2	110	ISO 8256/1A
Thermal Properties			
HDT,(0.45 MPa)	oC	75	ISO 75B-1
HDT,(1.80 MPa)	oC	43	ISO 75A-1
Melting Point	oC	131	ISO 11357
Vicat Temperature (B50,50 oC/h , 50 N)	oC	78	ISO 306
Hardness			
Ball indentation Hardness (H 132/30)	MPa	45	ISO 2039-1
FNCT (3.5MPa, 80°C, 2% Igepal BC/9)	h	6	ISO/CD 16770
ESCR(bottle test)	h	150	Basell

## APPLICATION

Additive

Antioxidant –Heat stabilizer

Extrusion Blow Moulding (Small blow mouldings, Engineering parts), Packaging of consumer goods, Packaging of dangerous goods, Packaging of surfactants