



شرکت پتروشیمی شازند (سهامی عام)

SHAZAND PETROCHEMICAL Co.

Technical Data Sheet

ARM CRP 100B(BLACK)

High Density Polyethylene

ARM CRP100B is high molecular weight HDPE grade with Outstanding Hydrostatic Strength, developed as leading PE 100 class for use in pressure and non-pressure pipes.

ARM CRP100B offers outstanding ESCR and high impact strength

Application Drinking Water Pipe; Gas Pipe; Industrial; Soil & Waste Pipe

Market Industrial, Building & Construction; Pipe

Processing Method Compression Molding; Pipe; Sheet

Attribute

Good Abrasion Resistance; Good Chemical Resistance;

Good Creep Resistance; Good UV Resistance; Good Wear Resistance

Good Weather Resistance; High Density; High ESCR

(Environmental Stress Cracking Resistance); High Viscosity;

SHAZAND PETROCHEMICAL CO.

Technical Data Sheet

ARM CRP100N

Typical properties	Test method	Unit	Value
MFI@190°C, 5.0Kg	ASTM 1238	gr/10min	0.2
MFI@190°C, 21.6Kg	ASTM 1238	gr/10min	6.2
FRR(21.6/5.0)	-----	-----	25
Mass Density(23°C)	ISO 1183	gr/cm3	0.948
SCG(Slow Crack Growth)	ISO 13479	hr	>500
Carbon Black Content	ASTM D 4218	%	2-2.5
Carbon Black Dispersion	BS-2782	Rating	max 3
Impact strength (23°C)	ISO 179/1eA	mj/mm ²	23
Hydrostatic Strength (80°C/5.5N/mm ²)	ISO 1162	hr	165
Hydrostatic Strength (80°C/5.5N/mm ²)	ISO 1167	hr	<1000

Mechanical

Typical properties	Test method	value
Tensile Stress at Yield,(23 °C, 50 mm/min)	ISO6260	23MPa
Tensile Strain at Break, (23 °C)	ISO6260	600MPa
Tensile Strain at Yield, (23 °C, 50 mm/min)	ISO6261	8.5 MPa
S.C.G.(80°C ,Hoop stress 4.6 Mpa)	ISO13979	>1000hr
R.C.P (0°C,6 bar. Speed of blade15m/s ,time 6hr)	ISO13477	0 mm
Hydrostatic Strength(80°C,@ 11.22bar,165hr,Sqeez-off)	ISO1167	>165hr
MRS Classification	ISO9080	10 Mpa

Impact

Charpy Impact Strength - Notched (23°C)	ISO 179-1/1eA	26 kJ/m ²
---	---------------	----------------------

SHAZAND PETROCHEMICAL CO.

Technical Data Sheet

ARM CRP100N

Hardness

Shore Hardness, (Shore D, 3 sec)	ISO 868	63
----------------------------------	---------	----

Thermal

Vicat Softening Temperature, (B50)	ASTM D 1525	74 °C
Oxidation Induction Time, (210 °C)	ISO 11357-6	30 min
DSC Melting Point	-----	129 °C

Additional Information

Volatiles	BP Method	349ppm
Contamination	Hoechst Method	2

∅ Values shown are typical & are not to be considered as product specifications.

SHAZAND PETROCHEMICAL CO.

Technical Data Sheet

ARM CRP100N