

# HDPE TECHNICAL DATA SHEET

Novathene Polyethylene Sheets are made from Polyethylene, the best known volume plastic. It has a relatively high molecular form with medium to high density. Novathene PE sheets are stabilized against UV radiation effects to counteract heat fatigue and increase life. They exhibit good toughness, high resistance to stress cracking & good chemical resistance against many organic & inorganic media. PE is non-toxic and non-staining & is often chosen because of its FDA approval and food contact suitability & its excellent machine-ability. The operating temperature ranges from -30 deg. C to 70 deg.

#### Key Features:-

- High Strength & Stiffness
- Low Specific Weight
- UV stabilized
- Outstanding Flexibility
- Good Low temp Resistance
- Good Abrasion resistance
- Weathering Resistance
- High Chemical Resistance
- Storage tanks and vessels
- Low Thermal Conductivity
- Protection from Stress Cracking
- Non Toxic & low water absorption
- Long Life and Durability
- Excellent Weldability
- Easy Installation / Skill Availability
- Machined parts
- Geomembrane sheets

#### Grades:

HPDE: P E100+, PE 300, PE80 Standard HDPE + LDPE: Flex Grade LDPE: Standard

NovaOrtho MDPE

Colours: Black, White, Custom

Embossing made to order.



### **Applications:-**

- Transport Containers
- Cover Strips, Baffles, Stack Separators
- Electrical Engineering
- Corrosion Protection Seals;
- Gearwheels
- Textile cans
- Housing
- Grips
- Liner for Gas Lines, other Lining jobs
- Manholes
- Orthotics and Prostheses
- Chemical Flooring
- Geo Thermal Applications; Insulation



### Standard Sizing:-

Thickness (in mm)	Width x Length (in m)	Packing		
0.2-1				
2	1.5 x 20	10 to 25 Pcs Or Roll form upto 6mm 4 / 5 / 6 / 8 Pcs		
3	1.22 x 2.44			
4	1.25 x 2			
5	1.5 x 3			
6		4 / 5 / 6 Pcs		
8	1.22 x 2.44 1.25 x 2 1.25 x 3 1.5 x 3	3 / 4 / 5 Pcs 2 / 3 / 4 / 5 Pcs 2 / 3 / 4 Pcs		
10				
12				
15		2 / 3 Pcs		
20		1 Pc		
25		1 Pc		
30-200	1.00 x 2	1 Pc		

## **Typical Properties**

Properties	Test Method	Unit	Value				
			PE63	PE80	PE100	MDPE	LDPE
Specific gravity (ρ)	ISO 1183	g/cm³	>0.94	>0.94	>0.94	>0.93	>0.92
Water saturation	ISO 15512	%	0.01	0.01	0.01	0.01	0.01
Max. permissible service		°C	45	45	45		80
temperature							
Lower permissible service		°C	-65	-65	-65		50
temperature							
Tensile strength at yield	ISO 527	Мра	>19	>21	>23	>14	>11
Tensile strength at break	ISO 527	Мра	>21	>23	>25	>17	>14
Elongation at yield	ISO 527	%	>8	>8	>8		
Elongation at break	ISO 527	%	>600	>600	> 600	≥600	≥600
Notch impact strength	ISO 179	KJ/m2			26		85
Impact strength	ISO 179	KJ/m2	NB	NB	NB	No Break	No Break
Modulus of elasticity	ISO 899	Мра	>600	>700	>850	760	260
Shore hardness	ISO 868	Shore -D	>61	>61	>61	53-62@73 <sup>0</sup> F	55
Flexural strength	ISO 178	Мра	22	22	22	40	80
Vicat Softening Temperature	ISO 306	°C	>70	>70	>70	80	94

N.B.: Technical data refers to average values. The information provided above is based on the values measured in our laboratory as well as independent laboratories. The quoted values are based on specific resin properties and are subject to change without prior notice.

For further details on the product, kindly contact us at : e-mail: emarketing@sangir.com / sales@sangir.com

Tel: +91 022 28717800 (30 lines)

Website: www.sangir.com