



LT RUBBER MAUFACTURING SDN BHD

No 8, Lorong Sentosa, Kawasan Perusahaan Sri Cheeding, 42700, banting, Selangor Darul Ehsan.



Low Friction Face Pads - (Ship Friendly Resin Pads)

UHMW-PE is characterized by corrosion resistance, water resistance, as well as high impact strength even with very low temperatures. The material offers a combination of low friction together with high wear resistance. Consequently, UHMW-PE material is most suitable for marine application.

- Thickness from 2 – 200mm
- Length is 300 – 3000mmL

The standard colour is black. Other colours such as green, yellow , white or red are available upon request.

Features

- Low friction coefficient
- Resists marine borers
- High abrasion resistance
- Impact resistance
- UV and ozone resistance
- Does not rot, split and crack
- Are not influenced by water
- 100% recycalable

Applications

- * Fender pile protection with rubber strip
- * Pile cap protection at Jetty or Bridge
- * Workboat belting
- * Lock protection
- * Lock gate mitres



PHYSICAL + MECHANICAL PROPERTIES OF UHMW-PE

Properties	Test Method	Unit	Typical values (Virgin)
Density	ISO 1183-1	g/cm ³	0.94-0.95
Notched Impact Strength (Charpy)	ISO 11542-2	Kg/m ²	140-170
Abrasion Index (Sand-slurry)	ISO/DIS 15527	100	100-110
Yield Strength	ISO/R 50mm/min	N/mm ²	15-20
Elongation at Break	ISO/R 50mm/min	%	>50
Dynamic Friction (PE-Steel)	Pm=1N/mm ²		0.15
	V = 10m/min		
Hardness	ISO 868 / DIN 53505 3S value, 6mm sample	Shore D	63
Operating Temperature	-	OC	-80 to + 80
Thermal Expansion	DIN 53752	K-1	2 x 10 ⁻⁴
Molecular Weight	Visco metric	g/mol	4,200,000
Melting Point	ASTM D3418	OC	137-143

PHYSICAL + MECHANICAL PROPERTIES FOR RUBBER FENDER STRIP

Tensile Strength	BS ISO 37	Before ageing After ageing 70oC x 96 hours	16MPa Min.
			More than 80% to original
Elongation		Before ageing After ageing 70oC x 96 hours	350% Min. More than 80% to original
Hardness	BS ISO 48	Before ageing After ageing 70oC x 96 hours	82 max. Less than +8 to original
Ageing	BS ISO 188	70oC x 96 hours	
Compression set	BS ISO 815-1	72 x 24 hours	30% max
Tear Resistance	BS ISO 34-1	Crescent type	70N/mm Min.
Abrasive Wear	BS ISO 4649	Akron Method	1.5mm Max.
Bond Strength	BS ISO A21.1	90 degrees	7N/mm Min.
Oil Resistance	BS ISO 1817	Heavy oil 23oC x 24 hours	Volume change 20% Max Volume change 60% Max
Seawater Resistance	BS ISO 1817	3% NaCl solution 23oC x 24 hours	Volume change +10%/-5% Max.
Ozone Resistance	BS ISO 1431-1	50pphm 20% at 40oC x 100 hours	No Crack
Density	BS ISO 2781		1.1g/cc to 1.30g/cc