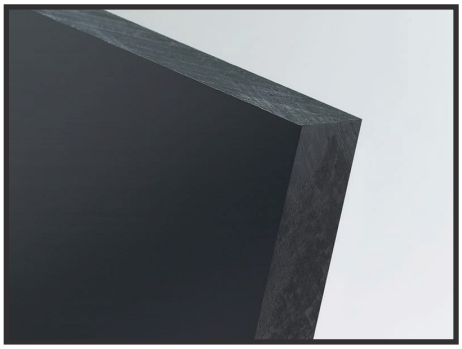
TECHNICAL DATA SHEET

Queensland Gaskets

HDPE (HIGH DENSITY POLYETHYLENE)



Known for its premium quality HDPE plastic (High Density Polyethylene), also known as PE100. The black UV-stabilised material offers the advantage of high impact strength even at low temperatures together with good corrosion resistance. It boasts excellent processing properties and is highly tolerant of chemicals. The natural PE is approved for contact with food FDA. Our range has a service temperature range from -50 degrees C to +80 degrees C.

APPLICATIONS

- Shipbuilding
- Chemical installations
- Pharmaceuticals & bioindustry
- Livestock farming & agriculture
- Fish farming
- Automotive
- Water supply
- Seawater desalination
- Elevated water tanks
- Sewage treatment plants
- Swimming pool construction

TECHNICAL INFORMATION

	Test Method	Unit	Value
General Properties			
Density	DIN EN ISO 1183-1	g/cm^3	0,96
Water absorption	DIN EN ISO 62	%	<0,01
Flammability (Thickness 3mm/6mm)	UL 94		HB

Contact us to discuss requirements and place your order 07 3277 3922

All information and data quoted has been provided by our suppliers and is based upon years of experience in the production and operation of sealing elements. This data may not be used to support any warranty claims. With its publication this latest edition supersedes all previous issues and is subject to change without further notice.

TECHNICAL INFORMATION

	Test Method	Unit	Value
Mechanical Properties			
Yield stress	DIN EN ISO 527	N/mm^2	22
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	800
Notched impact strength (charpy)	DIN EN ISO 179	kJ/m^2	10
Shore hardness	DIN EN ISO 868	scale D	63
Thermal Properties			
Melting temperature	ISO 11357-3	° C	135
Thermal conductivity	DIN 52612-1	W / (m * K)	0,40
Thermal capacity	DIN 52612	kJ / (kg * K)	1,90
Coefficient of linear thermal expansion	DIN 53752	$10^{-6}K^{-1}$	150-230
Service temperature, long term	Average	° C	-50 … 80
Service temperature, short term (max.)	Average	° C	100
Heat deflection temperature	DIN EN ISO 306, Vicat B	° C	67
Electrical Properties			
Dielectric constant	IEC 60250		2,5
Dielectric dissipation factor (10^6Hz)	IEC 60250		0,0004
Volume resistivity	IEC 60093	Ω*cm	$>10^{14}$
Surface resistivity	IEC 60093	Ω	$>10^{14}$
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV/mm	45