

## Nitrile: Resistance to organic oils and chemicals

Specifying the right lining material for oil or chemical service used to be a compromise. Natural Rubber gives good abrasion resistance, but is not suitable for oil immersion. Normal nitrile-based rubbers offer excellent oil resistance, but their poor wear performance limits their use in high abrasion applications.

Linagard® NBR is a nitrile based rubber specifically formulated to give good abrasion resistance in the presence of oils and chemicals. Linagard NBR also exhibits excellent high temperature service and can be used up to 110°C (230°F) with suitable adhesives, or where mechanical fixing is employed.

### Features

- Resistant to mineral / vegetable oils
- Resistant to chemicals, greases and aliphatic hydrocarbons
- Excellent resistance to high temperature, thermal ageing and fatigue
- Good resistance to wear
- Low permeability to gases

### Applications

- Linings for mining applications, fertiliser works and sand processing circuits where oil-based reagents are used
- Pump linings and impellers for the chemical industry
- Rubber coating for transmission belts

### Size/Availability

- Standard sheet size: 9.25m x 1.23m nominal (approx. 30ft x 4ft)
- Part sheets available to order
- Standard thickness range: 3.0mm to 35.0mm (approx. 1/8" to 13/8")
- Moulded components available from stock and made to order



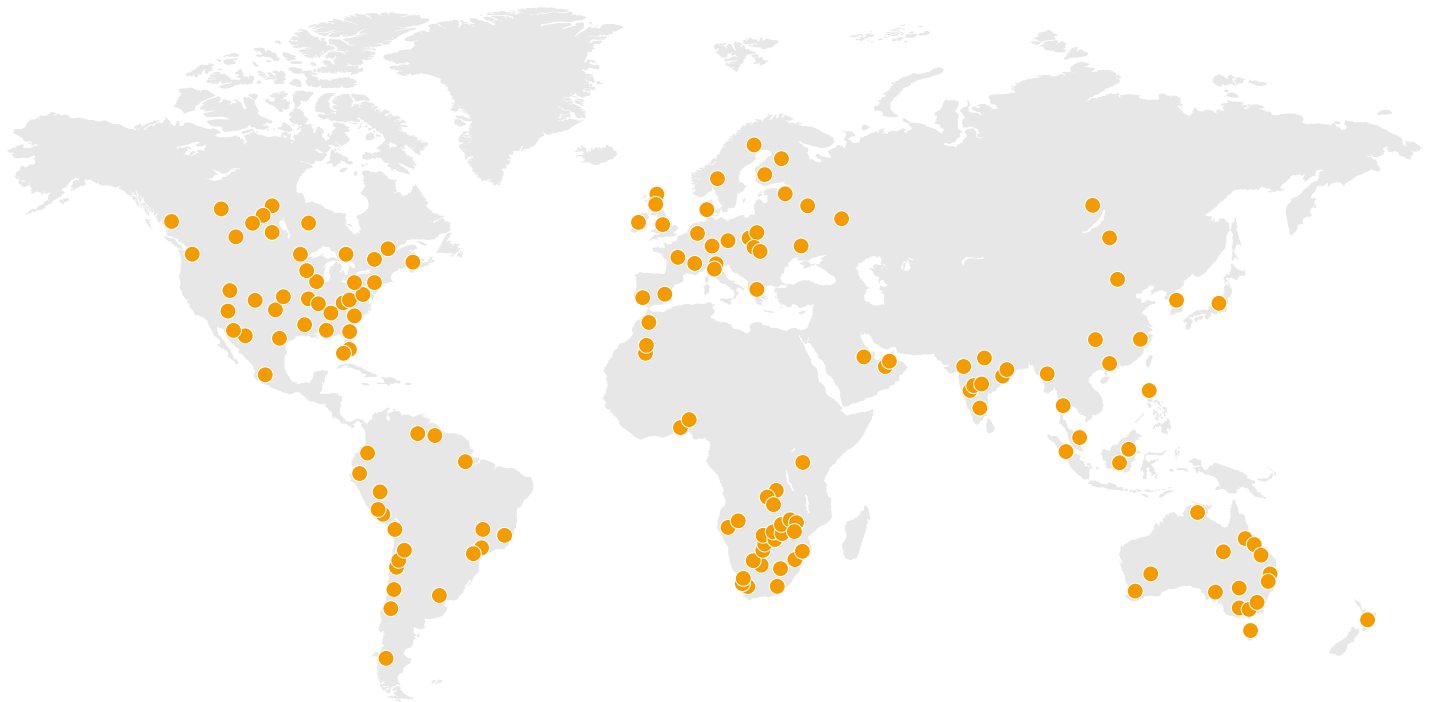
### Bonding Systems and Installation

Specifically designed two part bonding systems are available from Weir Minerals. Please consult your local representative for advice on the most suitable bonding method.

[www.weirminerals.com](http://www.weirminerals.com)

### Typical Physical Properties

	TEST STANDARD	LINAGARD NBR
Polymer Type		NBR
Hardness (IRHD)	ISO 48 – 1994	55
Modulus @ 500% (MPa)	ISO 37 – 2005	4.0
Tensile Strength (MPa)	ISO 37 – 2005	11.8 (1711 psi)
Elongation at Break	ISO 37 – 2005	660%
Tear Strength (N/mm)	ISO 34-2004 (Method C)	19.2 (110 lbf/in)
Specific Gravity	BS 903: Part A1: 1995	1.08
Resilience	BS 903: Part A8: 1990	45%
Operating Temperatures (Continuous use)		-20°C to +110°C / -4°F to +230°F
Colour		Orange



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**LINATEX® Rubber Products**

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