



# GRIN-FOOD HIPHTHANE-BLUETHANE

## Design Description

GRIN is universally applicable sealing material which can be characterized by its wide service temperature range. The material has very good values for tensile strength, elongation at break and tear strength.

GRIN is a food grade polymer and it is FDA approved. It also has a very low compression set. Its excellent wear resistance, high elasticity, high dynamic resistance as well as low permeability are other advantages.

### Features

- Outstanding toughness & abrasion for high pressure applications
- Mineral oil compatibility is good
- Good resistance to ozone attack & weathering

Properties	Standard	Unit	Value
Hardness	DIN 53505	Shore A	95 ±2
Hardness	DIN 53505	Shore D	46 ±2
Density	DIN 53479	g/cm <sup>3</sup>	1.2
Tensile strength	DIN 53504	N/mm <sup>2</sup>	31
Elongation at break	DIN 53504	%	400
Stress ratio 100%	DIN 53504	N/mm <sup>2</sup>	17
Stress ratio 300%	DIN 53504	N/mm <sup>2</sup>	38
Compression set 20 °C/24h	DIN 53517	%	10
Compression set 70 °C/70h	DIN 53517	%	20
Tear strength	DIN 53515	N/mm	130
Elastic recovery	DIN 53512	%	26
Abrasion	DIN 53516	Mg loss	45
Minimum application temperature		°C	-30
Maximum application temperature		°C	115
Elongation at break after 2000h			440
Storage in distilled water at 95°C			440
Swell in water		%	0.3-0.4 max