

ROPLASTHAN 1300

RoPlasthan is a unique non-cellular polyurethane elastomer for high performance applications. It is designed to fulfill individual requirements in the engineering, automotive, aircraft, marine, petrol, medical and food industries. RoPlasthan features outstanding mechanical properties combined with excellent thermal and chemical stability. It shows good dynamic behavior even under extreme environmental conditions.

ROSEN offers tailor made RoPlasthan elastomers between 55 Shore A and 70 Shore D to comply with the customer's individual demand.

RoPlasthan 1300 prominent features

- Excellent hydrolysis resistance
- High abrasion resistance
- Excellent compatibility to corrosive chemicals, e. g., non aqueous ammonia (99 %)
- High elasticity at very low temperatures

The following tables give a general overview about mechanical properties and compatibility of RoPlasthan 1300 polyurethane elastomers.

Mechanical Properties – RoPlasthan 1300

Description	Standard	Unit	1300-65A	1300-75A	1300-85A	1300-95A
Hardness	DIN 53505	Shore A	65 ±5	75 ±5	85 ±5	95 ±5
Tensile strength	ISO 37	N/mm ²	20	25	35	40
Elongation at break	ISO 37	%	500	500	450	400
Tear strength	ISO 34-1 (Method B)	N/mm	15	20	30	35
Abrasion resistance	ISO 4649	mm ³	20	25	30	30
Density	ISO 2781	g/cm ³	1.04	1.06	1.08	1.10

Compatibility – RoPlasthan 1300

Description	Example	Temporary	Permanent
Operating temperature*		Up to 90 °C (194 °F)	-50 °C to +70 °C (-58 °F to +158 °F)
Hot water steam		Resistant	Resistant
High corrosive chemicals	Ammonia (non aqueous)	Resistant	Resistant
Acids (concentrated)	Hydrochloric Acid, Sulfuric Acid	Resistant	Resistant
Acids (diluted, < 3 %)	Hydrochloric Acid, Sulfuric Acid	Resistant	Resistant
Crude oil, gasoline and diesel		Resistant	Resistant
Organic solvents		In general good resistance to a wide range of organic solvents	

*Dry air, depending on application

Please contact us for detailed information about resistance to your specific product.

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