

# ROPLASTHAN 1200

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.

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

## RoPlasthan 1200 prominent features

- Hydrolysis resistance
- High abrasion resistance
- Excellent compatibility to oil and gases

The following tables give a general overview about mechanical properties and compatibility of RoPlasthan 1200 polyurethane elastomers.

## Mechanical Properties – RoPlasthan 1200

| Description         | Standard            | Unit              | 1200-55A | 1200-65A | 1200-75A | 1200-85A | 1200-95A |
|---------------------|---------------------|-------------------|----------|----------|----------|----------|----------|
| Hardness            | DIN 53505           | Shore A           | 55+5     | 65 ±5    | 75 ±5    | 85 ±5    | 95 ±5    |
| Tensile strength    | ISO 37              | N/mm <sup>2</sup> | 20       | 30       | 35       | 45       | 45       |
| Elongation at break | ISO 37              | %                 | 550      | 450      | 420      | 400      | 380      |
| Tear strength       | ISO 34-1 (Method B) | N/mm              | 16       | 20       | 25       | 40       | 45       |
| Abrasion resistance | ISO 4649            | mm <sup>3</sup>   | 15       | 20       | 25       | 25       | 30       |
| Density             | ISO 2781            | g/cm <sup>3</sup> | 1.2      | 1.2      | 1.2      | 1.2      | 1.2      |

## Compatibility – RoPlasthan 1200

| Description                    | Example                          | Temporary  | Permanent                            |
|--------------------------------|----------------------------------|--|--------------------------------------|
| Operating temperature*         |                                  | Up to 100 °C (212 °F)  | -25 °C to +80 °C (-13 °F to +176 °F) |
| Hot water steam                |                                  | Resistant  | Non resistant                        |
| Acids (concentrated)           | Hydrochloric Acid, Sulfuric Acid | Resistant  | Non resistant                        |
| Acids (diluted, < 3 %)         | Hydrochloric Acid, Sulfuric Acid | Resistant  | Non 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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