

Overview of Materials

Standard Range



Sylomer® - Excellent elasticity and durability

Material characteristics:

- Mixed-celled construction
- Static range of use 0.011 N/mm² to 1.2 N/mm²
- Load peaks to 6.0 N/mm²
- Insignificant amplitude dependence
- Proven long-term performance
- Fatigue strength
- Optimized range of products (10 standard types) to cover the needs of calculations for systems
- Customer-specific adjustments are possible

Universal elastic PU material, **spring-dampening combination**, trusted for almost 50 years

Examples of use:

- As a compression-loaded support element for vibration isolation in construction, rail and equipment applications
- Mass-spring systems, under ballast mats, under sleeper pads, rail pads, baseplate pads
- Load bearings for architectural applications, optional full surface, strips and discrete bearings
- Foot fall bearings
- Stairs and landings
- Bearings of machinery, bearings of foundations
- Elastic components for transport rollers and belts
- Elastic press mats
- Highly flexible seals
- Formed parts, semi-finished flat parts



Sylodyn® - Outstanding dynamic load bearing capacity

Material characteristics:

- Closed-celled construction
- Static range of use for standard product types from 0.075 N/mm² to 12.0 N/mm²
- Load peaks to 24.0 N/mm²
- Insignificant amplitude dependence
- Minimal tendency to creep
- Stiffening factor from (C_{dyn}/C_{stat}) 1.15 to 1.40
- Proven long-term performance
- Fatigue strength
- Optimized range of products (8 standard types) to cover the needs of calculations for systems
- Customer-specific adjustments are possible

Sylodyn® material featuring exceptional **dynamic and highly elastic** properties, for technical applications, trusted for over 20 years

Examples of use:

- As a compression-loaded support element for vibration isolation in construction, rail and industry sector
- Mass-spring systems, under ballast mats, under sleeper pads, rail pads, baseplate pads
- Load bearings for architectural applications, optional full surface, strips and discrete bearings
- Stairs and landings
- Bearings of machinery, bearings of foundations
- Elastic component for transport rollers and belts
- Elastic press mats
- Highly flexible seals
- Formed parts, semi-finished flat parts



Sylo damp® - Excellent dampening

Material characteristics:

- Mixed-celled construction
- Static range of use from 0.005 N/mm² to 0.5 N/mm²
- Visco-elastic PU structure
- Outstanding specific energy absorption
- Mechanical loss factor of 0.46 to 0.61
- Optimized range of products (6 standard types) to cover the needs of calculations for systems

Sylo damp® material with special energy-absorbing properties, **dampening**

Examples of use:

- Bump stops
- Technical components for dampening vibration and noise
- Shock absorbers
- Combinations with springs

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Sylomer® FR, Sylomer® Marine FR Fire retardant

PU elastomer, **spring-dampening combination** with specific fire protection properties

Material characteristics:

- Fire retardant, mixed-celled PU material
- Static range of use 0.018 N/mm² to 0.22 N/mm²
- No halogenated fire protection agents
- Available with fire safety certificate conforming to IMO MED 307(88), FTP Codes 2 and 5 referred to in the SOLAS Convention and with Wheelmark approval

Examples of use:

- Elastic decoupling in rolling stocks
- Elastic bearings in yachts, commercial vessels and on offshore platforms
- Various applications in the construction industry



Sylomer® CT - Sliding/adhesion layer*

Coating, polyurethane with excellent adhesion or sliding properties

Material characteristics:

- Special PU spray-on coating for surface treatment
- Sliding layer: Shore hardness 90 Sh A
- Adhesion layer: Shore hardness 60 Sh A

Examples of use:

- Sliding layer for pads (e.g. machine feet)
- Adhesion layer
- Sealing gasket
- Multi-functional PU layer for use with various base materials



Sylomer® EK - Excellent abrasion properties*

Compact polyurethane with good abrasion properties

Material characteristics:

- High abrasion and tearing resistance
- Excellent elasticity
- Can be combined with shock-absorbing layer for discrete elastic coverings
- Simple installation by gluing
- Resistant to impacts
- High rebound elasticity
- Shore hardness: 82 Sh A

Examples of use:

- Combined noise and anti-wear protection
- Stamping belts
- Load distribution layers
- Semi-finished flat parts
- Elasticity and anti-wear-protection for filling equipment

*These materials will be produced tailor-made according to customer requirement and will not be available from stock. After receipt of firm order the time of delivery will be 8 weeks minimum. All materials can be modified according to customer requirements. For such specific enquiries please contact our technical staff.

All data is based on the information currently available to us. The data can be applied for calculations and as guidelines and are subject to typical manufacturing tolerances; we reserve the right to amend the data.

