

Overview of Materials

Standard Range



Sylomer® - Excellent elasticity and durability

Universal elastic PUR material, **spring/dampening combination**, trusted for over 40 years

Material characteristics:

- Mixed cell 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

Examples of use:

- As a compression-loaded support element for vibration isolation in construction, rail and equipment applications
- Mass spring systems, 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

Sylodyn® material featuring exceptional dynamic and highly elastic properties, **for technical applications**, trusted for over 15 years

Material characteristics:

- Closed cell construction
- Permanent static load for standard product types from 0.075 N/mm² to 1.5 N/mm², special types to 2.5 N/mm² (N80 - 1030, for specific projects)
- Load peaks to 8 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 (5 standard types) to cover the needs of calculations for systems
- Customer-specific adjustments are possible

Examples of use:

- As a compression-loaded support element for vibration isolation in construction, rail and equipment applications
- Mass spring systems, 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



Sylomer® HD - Excellent dampening

Sylomer® material with special energy-absorbing properties, **dampening**

Material characteristics:

- Mixed cell construction
- Visco-elastic PUR structure
- Outstanding intrinsic shock absorption
- Mechanical loss factor of 0.55 to 0.60
- Optimized range of products (3 standard types) to cover the needs of calculations for systems

Examples of use:

- Absorption of shock-like loads
- Buffer components
- Technical components for dampening vibration and noise
- Shock absorbers
- Formed parts
- Combinations with springs

Overview of Materials



Sylomer® FR - Fire retardant

PUR elastomer, **spring/dampening** combination with specific fire protection properties

Material characteristics:

- Fire retardant, mixed cellular PUR material
- Static range of use 0.028 N/mm² to 0.11 N/mm²
- No halogenated fire protection agents

Examples of use:

- Elastic floor beddings in rail vehicles
- Decoupling of the inner and outer hulls in yachts
- Various construction applications



Sylomer® CT - Sliding/adhesion layer*

Coating, polyurethane with excellent adhesion or sliding properties

Material characteristics:

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

Examples of use:

- Anti-wear layer for buffer components
- Elasticity and anti-wear layer for filling equipment, trigger pads ...
- Sliding layer for pads (e. g. machine feet)
- Multi-functional PUR 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.

