

# Product information | Merbenit TS40

Merbenit TS40 is a transparent, duration-elastic and decrease-poor one-component adhesive sealant on the basis of MS hybrid polymers. Merbenit TS40 is moisture-hardening, neutral cross-linking and odourless. Furthermore it is free from solvents, silicone and isocyanate.

## Product advantages:

- Permanently transparent
- 1-component
- Easy processing
- Free of solvents, isocyanate and silicones
- Very wide adherence spectrum, also without primers
- Can be applied also to moist surfaces
- Nearly odourless
- Paintable (also wet on wet)
- Stable (thixotropic) up to 20 mm
- Corrigible
- Divided- and crack-bridging
- Compatible with grinding and varnishing
- Duration-Elastic of -40 °C to +80 °C
- High mechanical cohesiveness
- Very good abilities for sealing
- High resistance against aliphatic solvents, oils, fat, watered inorganic acids and alkalis
- Non corrosive on surfaces
- Corrosion protecting
- Shock-proof and vibration-firm (shock-absorbent)

## Processing:

■ Merbenit TS40 can be applied directly from the cartridge / sausage (manual or compressed air gun) as a rounding or triangular caterpillar in patrols. If a material side is diffusion-permeable, Merbenit TS40 can be applied also dimensionally with a spatula.

■ **Examples for flexible adhesion applications:** Signs, strips, diagonal braces, profiles, stiffening, fixtures, fittings, plates, sheet metals, receptacles, boxes, cabins, disguises, sandwich components, containers, constructions, bottom covers, frames, panels, coverings, shields, cuffs, nosing, protection joints.

**Fields:** Metal-, apparatus, machine building, electro-, plastic, ventilation and climate technique, automotive-, freight car-, vehicle-, container construction.

Through his transparent attitude Merbenit TS40 can be used everywhere there, where a coloured adhesive or sealant compound would be disturbing.

■ **Well suitable materials are for example:** Steel, high-grade steel, aluminium, alu-anodized, brass, copper (Caution with high temperatures due to solar radiation), glass (for indoor area), acrylic glass (for indoor area), ceramics, stone, concrete, ABS (possible primers), PBT, PVC hard and soft, PPE, PA6.6-30, EPDM, GFK, wood, powder-coated, coated, galvanized, chromalized and pot-galvanized surfaces. With materials which tend to stress cracks a preliminary investigation is recommended.

For surfaces not listed here, please ask our technical applications consultant department!



# Technical datas | Merbenit TS40

## CHEMICAL BASE

- Duration-elastic one-component adhesive and sealant based on MS hybrid polymer

## TECHNICAL DATAS

Product name	Merbenit TS40
Colour	transparent
Processing temperature with 60 % rf	+5 °C up to +40 °C
Volume change DIN EN ISO 10563	approx. 3 %
Consistency	thixotropic
Density with +23 °C	1.08 +/- 0.02 g/cm <sup>3</sup>
Skin forming time with +23 °C, 60 % rf	approx. 3 to 5 minutes
Curing through after 24 hours, +23 °C, 60 % rf	approx. 2.5 mm
Temperature stability after curing	-40 °C up to +80 °C
Shore A hardness, DIN 53505, after 3 weeks storage with +23 °C and 50 % rf	41 +/- 2
Modulus elongation at 100 % and +23 °C, DIN 53504 S2, storage during 7 days at +23 °C and 50 % rf	< 0.9 N/mm <sup>2</sup>
Tensile strength DIN 53504 S2, storage during 7 days at +23 °C and 50 % rf	approx. 2.5 N/mm <sup>2</sup>
Elongation at break DIN 53504	> 400 %

**Merbenit TS40 can yellowing under UV-influence.**

**For a typical window sealing we recommend Merbenit UV27.**

**Not suitable for bonding of back-wall-glazing with one-sided color coating.**

## CHEMICAL RESISTANCE

- Good: against water, aliphatic solvents, oils, fat, watered inorganic acids and alkalis
- Moderate: against esters, ketone and aromatics
- Not resistant: against concentrated acids and chlorinated hydrocarbons

## PRIMER

■ With many clean material surfaces a good liability also without primers is achieved. However, should be checked always, whether a strong media- and moisture-load influence on the cross-linked polymer and material. In this case and by near porous as well as difficult surfaces we recommend always the use of a suitable primer.

## SURFACE TREATMENT

■ The surface has to be stable, clean, dust-, oil- and fat-free. With acetone or isopropanol you receive good results.

## STICKING-SLIT

■ Optimal sticking-slit lies between 1 - 6 mm according to surface to be glued, material extension, tension and mechanical load.

## CLEANING

■ Cleaning not cured sealant: immediately with grain paper and isopropanol.

Cleaning of cured sealant: mechanically.

## STORAGE

■ In original packaging well closed, dry, protected from light and cool, nine month storable.

## PACKAGING FORMS

■ 290 ml cartridge, 600 ml sausages, 20 L hobbocs, 180 L drums

## DOSAGE

■ A fully automatic proportioning is possible.

## WORK AND ENVIRONMENTAL SECURITY

■ No dangerous goods, not marking-liable. Important information about work and environmental security you take disposal from the security data sheet please.

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