



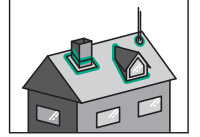
**RAMSAUER®**

# 390

**LASTING  
BONDS.**

## Spengler

**1-component synthetic rubber sealant**



## Technical data sheet

Version: 04-2023

### Tests:



## 1. Mechanical Properties

Basis	Synthetic rubber
Skin formation time	15-20 min. (23°C/50% relative humidity)
Full curing time	~1.0 mm/24 hours (at +23°C/50% relative humidity)
Density	~ 0.95 (EN ISO 1183-1)
Shore A hardness	~ 25 +/- 5 (DIN EN ISO 868)
Volume shrinkage	~ 20% (EN ISO 10563)
Module	~ 0.5 N/mm <sup>2</sup> (EN ISO 8339)
Resistance to high and low temperatures	-20°C to +100°C (long-term exposure)
Application temperature (substrate, environment)	Lower +5°C, upper +35°C
Admissible total deformation	25%
Colours	Crystal-clear
Packaging	310 ml cartridge, other containers on request
Shelf life of cartridges and foil bags	24 months in original packaging in cool and dry storage conditions

## 2. Properties

390 Spengler is a silicone-free, UV-resistant, solvent-based synthetic rubber joint sealant. The material is versatile and compatible with copper and bitumen. 390 Spengler adheres to most surfaces, even wet and slightly oily substrates. Excellent mould resistance. Coating compatibility with many coating systems is assured.



**RAMSAUER®**

# 390

**LASTING BONDS.**

# Spengler

### 3. Priming table

Key

+	Good adhesion without priming
-	No adhesion
Primer	Recommended primer

Glass	+
Tiles	+
Pine wood	-
Wet ground concrete	+
Concrete, formwork smoothness	+
Steel DC 04	+
Hot-dip galvanised steel	+
Stainless steel	+
Zinc	+
Aluminium	+
Aluminium AlMg1	+
Aluminium AlCuMg1	+
Aluminium 6016	+
Anodised aluminium	Primer 140
Brass MS 63 Hardness F 37	+
PVC Kömadur ES	Primer 100
PVC soft	+
PC Makrolon Makroform 099	-
Polyacrylic PMMA XT 20070 Röhm*1	-
Polystyrene PS Iroplast	+
ABS Metzoplast ABS 7 H	-
PET	+
PU waste quality	+
Copper	+
Polycarbonate	-
PMMA Röhm sanitary quality	-
Mirrors*2	-
Natural stone	-

This table is based on adhesion tests with Rocholl test specimens under laboratory conditions. In practice, the adhesive properties depend on a large number of external influences (weathering, contamination, loads, etc.). Therefore, this table is for guidance only and does not constitute a binding statement. For further information please contact our application engineering department. The tests carried out above only refer to the adhesive properties and have no significance in terms of compatibility with the stated substrates.

\*1: Different PLEXIGLAS® types exhibit certain differences in their chemical resistance. Stresses must be expected in some applications. The resulting stresses, in combination with certain agents, can lead to "stress cracking". The duration, temperature and concentration of the acting substance have a fundamental influence on any "stress cracks". When using our products in combination with PLEXIGLAS®, the suitability must therefore be checked in advance.

\*2: The compatibility with various mirror coatings by different manufacturers is regularly tested in our laboratory. Advance testing is recommended due to production processes of the various manufacturers, into which we have no insights, and as a function of the existing substrate and bonding variants.

### 4. Application

390 Spengler is ideally suited for expansion and perimeter joints in roof and wall areas. Bonds without primer on almost any substrate such as glass, wood, concrete, metal and many plastics.



**RAMSAUER®**

# 390

**LASTING  
BONDS.**

# Spengler

## 5. Meets the requirements of IVD instruction sheet

No. 19-1	Sealing of joints and connections in the roof area. Possible applications of sprayable sealants, assembly adhesives, butyl sealing tapes and profiles.
No. 25	Sealing joints and connections in plumbing

## 6. Processing

**General instructions:** The expiry date of the material must be observed, otherwise the stated mechanical properties of the product can no longer be guaranteed. Observe the ambient temperature and substrate temperature. The cartridge must be stored at room temperature before processing. **Pre-treatment of the adhesion surfaces:** the adhesion surfaces must be load-bearing, dry, and free of dust, grease, and oil. If required, carefully pre-treat the adhesion surfaces using a suitable primer. Smooth surfaces may be wet, while open-pored surfaces should be dry. We recommend a primer for extreme conditions and some plastics. **Joint design:** For motion compensating joints, the dimensions must be designed to absorb the maximum motion expected. The joint design must comply with the applicable standards and regulations. Joints must be backfilled with polyethylene rod. **Application of the sealant:** Working within the application temperature limits, the sealant must be applied uniformly to the joint avoiding inclusions. If the substrate is pretreated with primer, its flash-off time must be observed. If aged under water for a longer period of time, the joints can turn yellowish. However, this does not impair the material quality.

## 7. Application restrictions

**Caution:** Due to the large number of possible influences during processing and application, the processor must always carry out a test processing before use. Note the expiry date of the material. The curing speed increases with increasing coating thickness. If the material is used in coating thicknesses of more than 15 mm, please contact our application engineering department. If the products are stored and/or transported over a longer period of time (several weeks) at higher temperatures/humidity, the shelf life may be reduced or the material properties may change. Discolouration of the sealant can occur in combination with some coating systems (e.g. linseed oil varnish, stand oil varnish). Due to the large number of different coating systems, we recommend checking compatibility in advance. Not suitable for aquarium construction and drinking water applications. Avoid contact with materials containing bitumen and plasticisers.

## 8. Safety instructions

Please refer to the current EC safety data sheets. Data sheets are available at any time from our website at [www.ramsauer.eu](http://www.ramsauer.eu).

CAUTION: Flammable. Repeated contact may cause brittle or cracked skin. Vapours can cause drowsiness and dizziness. Do not inhale vapours. Avoid contact with eyes and skin. Waste and containers must be disposed of in a compliant manner.



**RAMSAUER®**

# 390

**LASTING  
BONDS.**

# Spengler

## 9. Application notes

Good ventilation must be ensured during processing and curing. Due to the large number of possible influences during processing and application, the processor must always carry out a test processing before use. Note the expiry date of the material. 1-component sealants are not suitable for full-surface bonding. The curing speed increases with increasing coating thickness. If the 1-component material is used in coating thicknesses of more than 15 mm, please contact our application engineering department. If the products are stored and/or transported over a longer period of time (several weeks) at higher temperatures/humidity, the shelf life may be reduced or the material properties may change.

## 10. Liability for defects

The information, in particular the suggestions for the processing and use of our products, is based on our knowledge and experience in normal use cases at the time of printing. Depending on the specific circumstances, in particular with regard to substrates, processing and environmental conditions, the results may differ from this information. Therefore the guarantee of a work result or a liability, for whatever legal reasons, can be justified neither from these references, nor from a verbal consultation, unless we are guilty of intent or gross negligence in this respect. Ramsauer guarantees that its products comply with the technical properties specified in the technical data sheets until the expiry date.

Product users must consult the latest technical data sheet, which can be requested from us. Our current General Terms and Conditions apply, which you can download at any time from our homepage at [www.ramsauer.eu](http://www.ramsauer.eu). On publication of a new version/revision of the technical data sheet, all previous versions of the respective product lose their validity.