4052
SMP | Silane modified polymer

Technical data sheet
Version: V0 - 10-2025

1. Properties
- SMP | free of silicone, isocyanate and solvents
- RTV1 compound
- very good initial tack
- excellent tensile shear strength values after just 2 hours
- adheres even to damp surfaces
- paintable in accordance with DIN 52452-4
- EMICODE® EC 1^{PLUS} ‚very low emission'

2. Areas of application
- Special SMP for applications where very high initial tack is essential.
- For sealing and bonding a wide variety of materials that require a rigid connection.

3. Technical data

CTM*	Standard	Feature	Unit	Value
		Base		SMP
		Curing mechanism		RTV 1
		Skin formation time at +23 °C | 50% RH	mins	~ 8
		Full curing time at +23 °C | 50% RH	mm/24 hrs	~ 2.00
	EN ISO 1183-1	Density	g/cm³	~ 1.53
	DIN EN ISO 868	Shore A hardness		~ 73
	EN ISO 10563	Volume shrinkage	%	~ 3.50
		Initial tack		medium
	DIN 53504-S2	Elongation at break	%	~ 300
	DIN 53504-S2	Tensile strength	N/mm²	~ 2.70
	DIN 53504-S2	Modulus of elasticity 100%	N/mm²	~ 2.40
	DIN EN ISO 17178	Tensile shear strength after 2 hours	N/mm²	~ 0.98
	DIN EN ISO 17178	Tensile shear strength after 3 hours	N/mm²	~ 1.37
	DIN ISO 34-1	Tear resistance	N/mm	~ 21.30
		Temperature resistance (long term exposure)	°C	-40 to +90
		Processing temperature	°C	+5 to +35
f-1-0/g-1-0		Shear stress | 51/s	Pa	~ 7640
f-1-0/g-1-0		Viscosity | 51/s	Pa·s	~ 150
	DIN EN ISO 8394-1	Extrusion rate 310 ml cartridge	g/min	~ 55
		Electrical conductivity (volume resistance)	Ω·cm	> 1 x 10^{10}
		Thermal conductivity	W/(m·K)	~ 0.45
		Colours	White	
		Packaging	Barrel, hobbock, 400 & 600 ml film bag, 310 ml cartridge	
		Shelf life	Barrel/hobbock: 6 months Film bag/cartridge: 12 months (when stored in a cool and dry place in the original container)	

* Corporate Test Method | CTM copies available on request

4. Substrate preparation

The adhesive surfaces must be stable and free of dust, oil and grease. On non-absorbent substrates, pre-cleaning with 828 Basic Cleaner is recommended. For sensitive surfaces, compatibility should be checked in advance to avoid surface damage. If necessary, carefully pre-treat the adhesive surfaces with a suitable primer. Sanding with fine abrasive fleece can further improve adhesion on smooth surfaces. Due to the many different coating systems, an adhesion test is recommended before application on painted surfaces.

Substrate*	**Pre-treatment**
ABS Metzoplast ABS 7 H	828 Basic Cleaner | Primer 100
Aluminium	828 Basic Cleaner
Aluminium 6016	828 Basic Cleaner | Primer 140
Aluminium AlCuMg1	828 Basic Cleaner
Aluminium AlMg1	828 Basic Cleaner
Anodised aluminium	828 Basic Cleaner
Concrete formwork smooth	free of dust
Concrete wet, polished	free of dust
EPDM Semperit E9614	828 Basic Cleaner
GFK	828 Basic Cleaner
Glass	828 Basic Cleaner
Natural stone	828 Basic Cleaner
PC Makrolon Makroform 099	828 Basic Cleaner | Primer 100
PET	828 Basic Cleaner
PMMA Röhm sanitary grade	828 Basic Cleaner | Primer 100
Polyacrylic PMMA XT 20070 Röhm*1	828 Basic Cleaner | Primer 40
Polystyrene PS Iroplast	828 Basic Cleaner | Primer 100
PVC Kömadur ES	828 Basic Cleaner | Primer 100
PVC soft	828 Basic Cleaner
Steel DC04	828 Basic Cleaner
Steel hot-dip galvanised	828 Basic Cleaner
Stainless steel	828 Basic Cleaner
Tile	828 Basic Cleaner
Zinc	828 Basic Cleaner

* On substrates not listed in this table, the processor must always carry out preliminary tests to check the suitability of the product. This table is based on adhesion tests carried out on test specimens from Rocholl under laboratory conditions. In practice, adhesive properties depend on a variety of external influences (weather, contamination, etc.). Therefore, this table is for guidance only and does not constitute a binding statement. The tests carried out above refer only to adhesive properties and are not indicative of compatibility with the substrates mentioned.
*1: Different types of PLEXIGLAS® show certain differences in their chemical resistance. In some applications, the formation of stresses must be expected. These stresses, in combination with certain agents, can lead to 'stress cracking'. The duration of exposure, temperature and concentration of the acting substance have a fundamental influence on the possible 'stress cracks'. When using our products in combination with PLEXIGLAS®, the suitability must therefore be checked in advance.
*2: Compatibility with a wide variety of mirror coatings from different manufacturers is regularly tested in our laboratory. Due to the manufacturing processes of different manufacturers, which are not known to us in detail, and depending on the existing substrate and bonding variants, preliminary tests are recommended.

5. Processing

General information: 4052 can be processed at substrate and ambient temperatures between +5 °C and +35 °C. The ideal processing temperature is about +20 °C. The viscosity of the uncured material is temperature-dependent, meaning that viscosity increases at low temperatures and decreases at high temperatures. In addition, a variety of external influences, such as humidity, UV exposure, chemical influences, high temperatures, etc., must be taken into account. These and other factors can have a significant effect on the material properties of the product and its shelf life. The expiry date stated on the product must be strictly adhered to, as the product properties can no longer be guaranteed if this date is exceeded. Good ventilation must be ensured during processing and curing.

Processing: Before application, the processor must ensure that all materials that come into contact with the product do not cause any incompatibilities. When using a primer, its flash-off time must be observed. 4052 must be applied evenly and without bubbles.

Removal: Uncured 4052 can be removed with 502 Surface Cleaner or 504 Universal Cleaning Wipes, while cured material can only be removed mechanically. If it comes into contact with the skin, it must be cleaned immediately.

6. Application restrictions

- Not suitable for underwater use or glazing work.
- Avoid contact with bitumen-containing and plasticiser-releasing materials, such as butyl, EPDM, neoprene, etc.
- Not suitable for large-area bonding or joints with a depth of more than 15 mm.
- Without pre-treatment, no adhesion to plastics with low-energy surfaces, such as PE, PP or PTFE.
- We recommend water-based paint systems for painting over. Solvent- or oil-based paints and varnishes may interact with SMP.
- Not suitable for permanent sealing and bonding of copper and brass.

7. Safety notices

All safety notices and instructions are listed in the current safety data sheet available on **www.ramsauer.eu**.

8. Liability for defects

All information, in particular suggestions for the processing and use of our products, is based on our knowledge and previous experience. Depending on the specific circumstances, in particular with regard to the substrate, processing and environmental conditions, the results may differ from our specifications. Therefore, no guarantee can be given for the quality of the results achieved, which are influenced by the aforementioned circumstances. No legal claims of any kind can be asserted against Ramsauer GmbH & Co KG on the basis of this information or verbal advice, provided that we are not guilty of intent or gross negligence. Ramsauer GmbH & Co KG guarantees that its products will retain their technical properties as specified in the technical data sheets until their expiry date. Product users must observe the latest technical data sheet, which can be downloaded from our website at **www.ramsauer.eu**. Our current General Terms and Conditions apply. These are also available on our website. With the publication of a new version or revision of a technical data sheet, all previous versions of the respective product lose their validity.