

# Technical data sheet

Version: 07-2022

**Tests:** 



### **1. Mechanical Properties**

Basis	Hybrid adhesive - MS polymer		
Skin formation time	~ 10 Min. (23°C/50% relative humidity)		
Full curing time	~ 2.8 mm/24 hours (at +23°C/50% relative humidity)		
Density	~ 1.53 (EN ISO 1183-1)		
Shore A hardness	~ 49 (DIN EN ISO 868)		
Volume shrinkage	~ 2.6% (EN ISO 10563)		
Tear propagation resistance	~ 12.6 N/mm (ISO 34-1)		
Tensile stress at break	~ 1.7 N/mm² (DIN 53504-1 (S2))		
Module	~ 1.1 N/mm² (DIN 53504-1 (S2))		
Elongation at break	~ 450 % (DIN 53504-1 (S2))		
Resistance to high and low temperatures	-40°C to +90°C (long-term exposure)		
Resistance to high and low temperatures in the course of powder coating, short-term 15 to 20 min.	Up to +200 °C		
Application temperature (substrate, environment)	Lower +5°C, upper +35°C		
Colours	White and grey		
Consistency	Non-sagging		
Packaging	290 ml cartridges		
Shelf life of cartridges	12 months in original packaging in cool and dry storage conditions		
Shelf life of industrial container	6 months, cool and dry in sealed original container		

# 2. Properties

641 NAHT DICHT is characterised by an excellent adhesion profile on a wide variety of substrates and excellent mechanical properties over a wide temperature range. In contrast to silicone sealants, 641 NAHT DICHT can be overpainted with a wide range of commercially available water-soluble paints in accordance with DIN 52452. Due to the variety of paints and coatings available on the market, preliminary tests are essential. 641 NAHT DICHT is highly weather-proof and UV-resistant. The compound cures quickly without isocyanate and silicone.





LASTING BONDS

Good adhesion without priming

Key

**Naht Dicht** 

641

# 3. Priming table

		-	NO autresion
		Primer	Recommended primer
Glass	+		
Tiles	+		
Pine wood	+		
Wet ground concrete	Primer 70		
Concrete, formwork smoothness	+		
Steel DC 04	+		
Hot-dip galvanised steel	+		
Stainless steel	+		
Zinc	+		
Aluminium	+		
Aluminium AlMg1	+		
Aluminium AlCuMg1	+		
Aluminium 6016	+		
Anodised aluminium	+		
Brass MS 63 Hardness F 37	+		
PVC Kömadur ES	+		
PVC soft	+		
PC Makrolon Makroform 099	Primer 100 / Primer 105		
Polyacrylic PMMA XT 20070 Röhm*1	+		
Polystyrene PS Iroplast	Primer 100 / Primer 105		
ABS Metzoplast ABS 7 H	Primer 100 / Primer 105		
PET	+		
PU waste quality	Primer 100 / Primer 105		
Copper	+		
Polycarbonate	+		
PMMA Röhm sanitary quality	+		
Mirrors' <sup>2</sup>	-		
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

641 NAHT DICHT is suitable for bonding and sealing joint seams and overlapping joints in car body work, container and equipment building, and mechanical engineering. Can be applied to many clean, load-bearing, dust- and grease-free substrates without an additional primer.



#### 5. Meets the requirements of IVD instruction sheet

#### 6. Processing

**General instructions:** The materials to be sealed must be load-bearing, and free of dust, grease, and oil before applying 641 NAHT DICHT. Compatibility with various coatings, e.g., paints, varnishes, plastics, etc., must be checked prior to application or must be ensured with the sealant. 641 NAHT DICHT has an exceptional adhesion spectrum for a wide range of different substrates. Apply beads of adhesive to one side of the substrate, and complete bonding within the skin formation time. A manual or pneumatic applicator is used for processing. Adding moisture and higher temperatures can help to accelerate the curing speed. In applications involving powder coating, the material may only be overpainted after complete curing or cross-linking. Due to different baking times and temperature loads, preliminary tests or in-house test series are essential.

### 7. Application restrictions

**Caution:** 641 NAHT DICHT is not approved for applications with natural stone. 641 NAHT DICHT has no inherent adhesion properties on polyolefins and Teflon. In case of bonded joints or seals exposed to UV in glass or transparent plastics, please contact our application engineering department. Not suitable for processing in wet or underwater areas. For use in conjunction with roofing membranes and/or roofing foils, please contact our application engineering department. The suitability for use in applications involving powder coating depends on various factors and must be tested independently.

# 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**.

**Occupational health and safety:** Avoid swallowing, prolonged or repeated contact with the skin. Keep out of the reach of children. Request a safety data sheet!

### 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. 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. Prior to processing, the user must ensure that the components (gaseous, liquid or solid) coming into contact with the sealant/adhesive are compatible and that no damage or impairments can be caused. For full-surface bonding of vapour-tight substrates, one bonding side must be moistened (caution: avoid accumulations of water!).



### 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, with regard to the substrate, processing and environmental conditions, the results may differ from our information. No warranty or liability claim for any reason whatsoever arises from these instructions or from any instructions issued verbally. Ramsauer guarantees that its products comply with the technical properties specified in the technical data sheets until the expiry date.

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