

SSRK-1500 WEICON 2-PART ADHESIVE TECHNICAL DATASHEET



Liquid
Strong
Fast-curing

SSRK-1500 has high impact, peel, and shear strength.

The SSRK-1500 system consists of adhesive and activator, which are used in the “no mix” procedure. This makes processing easier by eliminating mixing procedures. SSRK-1500 is particularly well-suited for processing on large bonding surfaces. The transparent adhesive is especially suitable for bondings of glass, metal, and ceramics to themselves and among each other.

SSRK-1500 can be used in mechanical and apparatus engineering, vehicle construction, tool and mould making, the building and furniture industry, and in many other industrial applications.

ISSA: 75.629.53
IMPA: 81 29 92

Technical Data

Basis	Methyl methacrylate
Properties	liquid
Viscosity - Adhesive	4.500 mPa.s
Viscosity - Activator	very thin liquid mPa.s
Specific Weight - Adhesive	1.00g/cm ³
Specific Weight - Activator	0.87g/cm ³
Colour - Adhesive	yellowish, transparent
Colour - Activator	colourless, transparent
Consumption - Adhesive (depending on surface structure)	180-300g/m ²
Consumption - Activator (depending on surface structure)	30-150g/m ²
Evaporation Time - Activator at +20°C	5 min.
Effectiveness - Activator after Application at +20°C	max. 30 days
Processing Temperature	+10 to +30°C
Curing Temperature	+6 to +40°C
Gap Covering Power	max. 0.8 mm
Handling Strength (35% strength)	After 5 min.
Mechanical Durability (50% strength)	After 8 min.
Final Hardness (100% strength)	After 24 h
Average Tensile Shear Strength	After 7 days with DIN 53281-83
Aluminum, sand-blasted	26 N/mm ²
Steel, sand-blasted	25 N/mm ²
Stainless steel, sand-blasted	25 N/mm ²
Copper, sand-blasted	19 N/mm ²
Brass, sand-blasted	26 N/mm ²
ABS, roughened	6 N/mm ²
Hard PVC, roughened	11 N/mm ²
GRP, roughened	20 N/mm ²
Temperature Resistance	-50 to +130°C, short-term up to +180°C
Peel Resistance on Aluminum	6 N/mm
Thermal Conductivity	0.2 W/m.K
Dielectric Strength	10 kV/mm

Pre-treatment of the Surface

To ensure perfect bonding, the surfaces to be joined must be clean and dry. The highest strength values can be achieved through additional pre-treatment of the surfaces, such as roughening using blasting or abrasive agents.

Several plastics, in particular polyamide, PTFE, polyolefin, etc., are only to be bonded after special surface treatment; for example, using fluoridation, low-pressure plasma, corona, flame impingement, etc.

Processing

Processing of the SSRK-1500 Activator

The Activator is applied, depending on the size of the bonding gap, on either one side or both sides of the surfaces to be bonded (brush, spray, dip). In case of bond lines with a max. of 0.4mm in width, the Activator only needs to be applied on one side; for bond lines of up to a max. of 0.8mm in width and/or rough, porous, or passive surfaces (chrome, nickel, etc.), the Activator must be applied on both sides.

For smooth plastic and metal surfaces, approx. 30g/m² is necessary; for rough and porous surfaces, up to 150g/m² of Activator may be necessary. The evaporation time at room temperature (+20°C) is at least 5 minutes.

A significant advantage to other adhesive systems is that the coated components can be stored up to 30 days at room temperature (+20°C) without losing effectiveness.

Processing of the SSRK-1500 Adhesive

The Adhesive is applied only on one side and normally on the surface which is not coated with Activator. The width of the bond line can be up to 0.8mm (only if the Activator is applied on both sides). Bond lines of 0.15mm to 0.25mm in width always have the highest tensile shear strength.

Processing Temperature

The processing should take place at room temperature (approx. +20°C). Higher temperatures, e.g., +40°C, shorten the positioning and curing times by approx. 30%, whereas lower temperatures of approx. +10°C increase the respective times by approx. 50%, and up to +5°C, almost no reaction occurs anymore.

Storage

SSRK-1500 Construction Adhesives have a shelf life of at least 12 months if stored in a dry room at a constant temperature of approx. +20°C. At temperatures between +1°C and +7°C, the shelf life can be extended up to 24 months. This applies for closed original units which have not been directly or indirectly exposed to sunrays. In case of storage temperatures exceeding +40°C and high humidity, the shelf life is shortened to 6 months.

Note

Any product specifications and recommendations given herein must not be seen as guaranteed product characteristics. They are based on WEICON laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control, and responsibility, this information is provided without any obligation. We do warrant the continuously high quality of WEICON products being free from defects in accordance with and subject to our General Sales Conditions. Your own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended; however, a claim cannot be derived from them. The user bears the sole responsibility for non-appropriate or other-than-specified applications.

Health and Safety

When using WEICON products, the physical, safety technical, toxicological, and ecological data and regulations in the WEICON EC safety data sheets must be observed.



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