

# 690 2-K-MS KLEBER



**RAMSAUER®**  
**DICHTSTOFFE**

**2-component industrial adhesive on a hybrid basis**

## TECHNICAL DATA

Basis: 2-component hybrid sealant  
Shore hardness / 4 hours: ~ 25 (DIN 53505)  
Shore hardness / 24 hours: ~ 45 (DIN 53505)  
Shore hardness / 7 days: ~ 48 (DIN 53505)  
E-Modulus 100%: 0.5 N/mm<sup>2</sup> (DIN 53504 S2)  
Elongation at break: approx. 400 % (DIN 53504 S2)  
Tensile strength: approx. 1.7 N/mm<sup>2</sup> (DIN 53504 S2)  
Pot life +23°C / 50 % relative humidity: max. 40 min.  
Volume change: ~ 10 % (DIN 52451)  
Consistency: sag resistant up to a joint width of 40mm  
Processing time: approx. 25 – 45 min. (at 23°C/50% relative humidity)  
Curing: elastic and tack-free within 4 hours  
Density comp. A: ~ 1.37 g/cm<sup>3</sup> (at 23°C/50% relative humidity)  
Density comp. B: ~ 1.36 g/cm<sup>3</sup> (at 23°C/50% relative humidity)  
Temperature resistance: -40°C to +90°C (short time +180°C)  
Processing temperature: +5°C to +35°C  
Substrate temperature: +5°C to +30°C  
Storage life: 15 months in a cool and dry place in original package  
Colours: antique white, black  
Packaging: 250ml Easy Mix cartridge

## CHARACTERISTICS

690 2-K-MS KLEBER is a new and innovative adhesive and sealant based on a special quick in-depth curing formula for controlled polymer cross-linking even in case of deep glue joints or sealant joints. 690 2-K-MS KLEBER cures within 4 hours to provide sufficient load bearing capacity even in materials impermeable to air humidity such as metals, plastics, glass, and enamel-coated surfaces. Fast curing, very high tensile strength and excellent elongation at break open up a vast field of applications for 690 2-K-MS KLEBER which can be used wherever 1-component adhesives and sealants such as MS, PU, silicone (curing with air humidity) cause problems due to slower curing. The 250ml Easy Mix cartridge

## APPLICATION

690 2-K-MS KLEBER can be used for flexible gluing of sections, holding devices, fittings, slabs, sheet metals, claddings, components of sandwich-type assemblies, containers, superstructures, frames, panels, covers, etc. This product is highly versatile with a vast field of applications in metal construction, manufacturing of machinery and apparatus, in the vehicle and car body industry, as well as in the ventilation and air conditioning systems industry. The adhesive is highly suitable for steel, including high-grade



can be used with any customary gun for 1-component compounds. 690 2-K-MS KLEBER does not contain any solvents, isocyanate or silicone. The adhesive cures virtually without any odour and can be ground and covered with paint coats once it has cured completely.

steel, aluminium, anodised aluminium, brass, copper, glass, ceramics, stone, wood, concrete, as well as powder-coated, paint-coated, electroplated, chromated, and hot-dip galvanised surfaces. After curing 690 2-K-MS KLEBER can be exposed to high temperatures up to +180°C for a short time (up to 20 minutes) in the course of powder coating. The product is suitable for gluing mirrors and for preparing burglar resistant RC2/RC3 joints.

## MEETS THE REQUIREMENTS OF IVD-INSTRUCTION SHEET

As of the date of publication of this data sheet, the instruction sheet mentioned below is available in German only  
No. 30: Montageklebstoff für Klebungen und Abdichtungen (Mounting Adhesive for Gluing and Sealing)



### PROCESSING

The substrate must be dry, solid, clean, and free from dust, grease, and oil. Good adhesion to a variety of clean substrates is achieved even without a primer. When using the product in connection with certain synthetic materials, as e.g. acrylic glass, ABS, PBT, rigid and plasticised PVC we recommend to apply "Primer 100". Use "Primer 70" for absorbent and porous substrates. After preparation of the substrate open the cap of the Easy Mix cartridge and

introduce 690 2-K-MS KLEBER into the gun. Subsequently press until both components issue evenly (wipe off any excess material). Put the static mixer in place and press out the materials. In doing so ensure good and even mixing of components (discard the first approx. 5 cm). ATTENTION: If you intend to use pneumatic presses get in touch with our application engineering department.

### LIMITATIONS OF APPLICATION

690 2-K-MS KLEBER is not suitable for underwater joints in swimming pools and sanitary areas, or for building aquariums. Not suitable for sealing or gluing natural stone (contamination of edges). Not suitable for sealing glass grooves. Avoid any direct contact of the product with bituminous materials and materials releasing plasticisers, such as butyl, EPDM, neoprene, insulating paints and bituminous coatings used in swimming pools, basements, etc. Before application, the user

must make sure that all materials (no matter whether liquid, solid, or gaseous) which will be in contact with the sealant are compatible with it. Before using the product with laminated safety glass and/or insulating glass get in touch with our application engineering department. Before using the adhesive for burglar resistant joints it is imperative to verify its compatibility and/or test for compatibility with the edge sealing material.

### SAFETY ADVICE

Consult the current EC Safety Data Sheet which is available at any time on our website at [www.ramsauer.at](http://www.ramsauer.at).

### ADVICE FOR APPLICATION

Ensure sufficient ventilation during processing and curing. In view of the large number of factors which may affect processing and application the user must always try the specific application in an experiment before using the product. Take into account the expiry date of the product. Component A does not react with air humidity and is stable under normal conditions (23°C / 50 % relative humidity) Component B is sensitive to air humidity and must be protected against

humidity. Uniform and accurate mixing of components must be ensured. For this purpose it is recommended to take a sample each time when using the product and to compare it with a master sample. The products must be stored in the original container without any exception. In case of storage and/or transportation at increased temperatures or increased air humidity it is not possible to rule out a reduction of storage life and/or changes of material characteristics.

### PRIMING TABLE

Glass	+
Tiles	+
Pine wood	-
Concrete, wet-ground	RP 70
Concrete, according to formwork	RP 70
Steel DC 04	RP 140
Hot dip galvanised steel	+
High grade steel	+
Zinc	+
Aluminium	+
Aluminium AlMg1	+
Aluminium AlCuMg1	+
Aluminium 6016	+
Aluminium anodised	+
Brass MS 63 hardness F 37	+
Rigid PVC Kömadur ES	RP 100
PVC plasticised	RP 100
PC Makrolon Makroform 099	+
Polyacrylic PMMA XT 20070 Röhm	RP 100
Polystyrene PS Iroplast	RP 100
ABS Metzoplast ABS 7 H	RP 100

PET	-
PU blend quality	-
Copper	+
Polycarbonate	RP 100
PMMA Röhm sanitary quality	+
Mirrors	+
Natural stone	-

Legend:           + = adheres well without a primer  
                       - = not suitable  
                       RP = Ramsauer primer

This table is based on adhesion tests with test solids of Rocholl corporation under laboratory conditions. Under field conditions the adhesion characteristics are dependent on a variety of external factors (weather, impurities, burdens, etc.). Therefore this table serves for guidance only and does not constitute any binding statement. For more information get in touch with our application engineering department.

### LIABILITY FOR DEFECTS

The information provided including but not limited to the proposals for processing and using our products is based on our knowledge and experience, usually at the time of going into print. The results of work may deviate from this information depending on the specific circumstances, in particular with respect to substrates, processing and environmental conditions. Therefore, neither this information nor any oral counselling shall constitute warranty or give rise to any liability on whatever legal ground for any specific result

of work, unless we acted intentionally or by gross negligence. Ramsauer warrants that its products will have the technical characteristics according to the Technical Data Sheets up to their expiry date.

Product users must consult the latest data sheet which is available upon request. Our current General Terms and Conditions apply which are available for download on our website [www.ramsauer.at](http://www.ramsauer.at).



## QUALITY YOU CAN RELY ON

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