

## POLY-CHEM SEALANTS LTD.

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## PRODUCT DESCRIPTION

**MAT77** is a 2-component, solvent-free adhesive/sealant which has polysulfide characteristics. The rheological properties of the product make it suitable for manual and robot processing. The instructions of the equipment manufacturer should be observed. Application Areas **MAT77** adheres to glass, aluminium, galvanized steel and stainless steel without the use of primer. For other products, such as coated glass, glass from which the coating has been removed, treated spacer profiles or profiles made of other materials; relevant trials must be carried out to ensure the product's suitability. The use with polycarbonate or polymethyl methacrylate (PMMA) is not recommended. Only for insulated glass manufacturing, for different applications please contact our Technical Department.

## APPLICATION

### PRELIMINARY STATEMENT

Prior to application it is necessary to read the Safety Data Sheet for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labelling, the relevant precautions should always be observed.

### PRE-TREATMENT

All surfaces must be clean, dry and free from grease. **MAT77** is preferably applied at a material temperature of between +15°C and +25°C. For processing at temperatures below +15°C, the relevant instructions given in the recommendations by the equipment manufacturer must be taken into account. After the pot life has elapsed, **MAT77** cures rapidly. For this reason, care should be taken to remove the mixed material from the mixing equipment in due time, for instance by rinsing it with component A. Another possibility of prolonging the product's pot life is to store the mixing equipment in a freezer (at -25°C max.), which extremely slows down the curing reaction. A deep-frozen mixture is allowed to stay in the freezer for 24 hours max. Pot life depends on the temperature, i.e. higher temperature accelerates the curing process; reduce pot life and the permissible keeping time in the mixing equipment, whereas at lower temperatures curing is slowed down. The actual processing time depends on the technical conditions of the mixing equipment and on temperature. Due to its rheological properties, the product's temperature rises when it is fed and mixed in the equipment, so that the temperature of the mixture is approx. 7°C to 12°C higher than that of the components in their packaging units. Packaged in drums **MAT77** is processed using suitable dosing pumps with a follower plate. Heating of the product by means of the plate is allowed up to +30°C max. It is not possible to pre-heat an overcooled product (< +15°C) by means of the heated plate.

# MAT77

## Insulated Glass Sealant

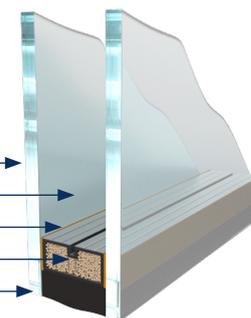
glass

MATFlow warm edge spacer

MATMol desiccant

MAT77 secondary sealant

MAT70 primary sealant



## TECHNICAL SPECIFICATION

TECHNICAL CHARACTERISTIC		
Solvent free thermoplastic insulating glass sealant based on		
	Component A (Base)	Component B (Catalyst)
COLOUR	Beige	Black
DENSITY	1,80 g/cm <sup>3</sup> - 1,86 g/cm <sup>3</sup>	1,60 g/cm <sup>3</sup> - 1,70 g/cm <sup>3</sup>
ODOUR	characteristic	odourless
CONSISTENCY	pasty - thixotropic	pasty - thixotropic
MIXING RATIO BY WEIGHT	10	0,96
MIXING RATIO BY VOLUME	10 +/- 20 % tolerance by Component B	1,00
MIXTURE (COMPONENT A + B)		
COLOUR	dark anthracite	
DENSITY	approx. 1,78-1,84 g/cm <sup>3</sup>	
CONSISTENCY	pasty - thixotropic	
SAG RESISTANCE	profile in horizontal position, in line with EN 27390: < 3 mm	
POTLIFE	30-60 minutes (23° C / 50% DIN 50014) >60 minutes (15° C / 50%) <30 minutes (30° C / 50%) <15 minutes (40° C / 50%)	
CURING TIME	approx. 3 hours (at standard temp. and humidity: 23° C / 50% DIN 50014)	
SHORE A HARDNESS according to DIN 53505 AVERAGE VALUES (at standard temp. and humidity: 23° C / 50% DIN 50014)		
AFTER 4 H	approx. 35	
AFTER 24 H	approx. 45	
AFTER 168 H	approx. 55	
TENSILE STRENGTH in line with DIN 52 455		
AVERAGE VALUE	approx. 0,8 MPa	

## STORAGE

### FROST-SENSITIVE

None. Prior to processing, the product must be brought to a suitable processing temperature (see relevant information).

### RECOMMENDED STORAGE TEMPERATURE

+15°C to +25°C. Must be protected from direct sunlight and/or thermal radiation. Storage at temperature between -20°C and +15°C does not cause damages to the product, but requires a sufficiently long pre-heating time. Depending on the time the product is exposed to cold, its preheating may need several weeks. When stored at temperatures >+25°C, the product's properties such as viscosity, sag resistance, potlife and curing time are affected.

### SHELF LIFE

9 months original closed packaging.

## HAZARD INDICATIONS SAFETY RECOMMENDATIONS TRANSPORT REGULATIONS

See Safety Data Sheet

## PACKAGING

	100 kg of component A
	10 kg of component B
	300 kg of component A
	30 kg of component B
<b>Drum kit</b>	336 kg of component A
	31 kg of component B
	190 liters of component A
	19 liters of component B
	10 kg of component A
	1 kg of component B
<b>Box kit</b>	30 kg of component A
	3 kg of component B

### DISCLAIMER:

The information, specified in this Product Information, is based on careful laboratory tests and prevailing practical experience. The information is not binding, which is also generally true for our practical customer service, given verbally, in writing and by tests, since, on account of the diversity of applications and use, also including possible industrial property rights of third parties, we cannot assume any responsibility. Analysis results and all information regarding state and suitability of our products are only guidelines with no obligation on our part, unless they have been guaranteed expressly in writing. We advise determining the suitability of our products with respect to their suitability for the intended use and application technology by adequate testing. In addition, our General Sales and Delivery Conditions are applicable.

This Technical Data Sheet supersedes all previous editions.

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## PRODUCT APPLICATION

Component A and B should be applied in proportion: volume A:B – 100:10, weight A:B – 100:9,2 before the prior clearance the adhesive surface. The correct proportion as well dry and free from impurities adhesive surface, guarantee the highest parameters of polymerization. During the longer breaks in production, it is necessary to freeze the handle or pass the base mass through the pistol to prevent combining the mass in the mixing appliance. A deep-frozen mixture is allowed to stay in the freezer for 24 hours max. The mixing nozzle and the pistol clean periodically with appropriate solvent. Maintenance the proper mixing installation cleanness ensures the precision of mixing as well preserves the proper ratio of mass mixing.

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## CAUTION

Hardener – component B is sensitive to moisture. Therefore it should be stored only in original, tightly closed packages. Package with the hardener must be opened directly before the using. Otherwise, the hardener becomes tough in conjunction with the moisture contained in the air. MAT 77 is chemically incompatible with sealants on the basis of polyurethanes. Dosing device requires precise purification in case of using other sealants on the basis of polyphenylene before. To install insulated glass units in window frames, it is necessary to use only compatible sealants that connect directly with the secondary liner.

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## PRECAUTION AND SAFETY

Follow the recommendations contained in the Product Safety Data Sheet. For more information familiarize with the Material Safety Data Sheet available on request.

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## HAZARD INDICATIONS SAFETY RE- COMMENDATIONS TRANSPORT REGULATIONS

See Safety Data Sheet

### PLEASE NOTICE:

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