

POLY-CHEM SEALANTS LTD.

HU-6771 Szeged-Szőreg, Magyar u. 207.

Tel.: +36 62 541 037

Fax: +36 62 541 036

Email: info@poly-chem.eu

PRODUCT DESCRIPTION

MAT70 are one-component, solvent free thermoplastic insulating glass sealants based on polyisobutylene which does not harden. Exposure to heat results in significant softening. The maximum final strength is only achieved after processing on a press. This results in physical adhesion. Very tight to water vapour, argon and sulphur hexafluoride. Adheres to all surfaces commonly used in the insulated glass industry such as glass, aluminium, zinc or stainless steel. MAT70 is used as a primary sealant in combination with a secondary sealant such as MAT77 or other sealants used in the manufacturing of insulated glass. Only for insulated glass manufacturing and for different applications please contact POLY-CHEM Technical Department.

TECHNICAL SPECIFICATION

TECHNICAL CHARACTERISTIC Solvent free thermoplastic insulating glass sealant based polyisobutylene.	
COLOUR	black
ODOUR	Weak, characteristic
DENSITY	1,19 g/cm ³ ± 3%
CONSISTENCY	Permanent plastic
WVTR	0,02 ± 0,03 gr H ₂ O/(m ² ·24h·2mm) acc. EN 1279:4
GAS PERMEATION	1,31±0,20 10 ⁻³ g/(m ² ·hour)acc. EN 1279:2002 5.3.2 - EN 1279:3
VOLATILE	See safety data sheet

MAT70

Primary sealant for insulating glass units

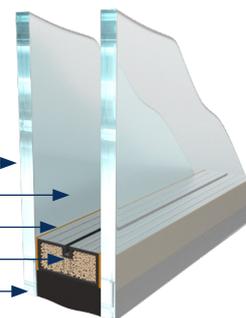
glass

MATFlow warm edge spacer

MATMol desiccant

MAT77 secondary sealant

MAT70 primary sealant



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

MAT70 is applied to the spacer bar. The required output is regulated on the extruder by varying pressure and temperature. The precise settings must be determined in tests prior to application. All surfaces must be clean, dry and free of grease. Condensation affects the adhesion. Spacer bars must be stored under the same climatic conditions that prevail in the production area. Exposure to heat results in significant softening.

APPLICATION

Application temperature is between 150°C - 170°C with extruder, with an application speed of 10-50 m/minute. As higher the temperature as higher the adhesion to surface. Application at higher speeds of 60-100 m/minute is possible with application temperatures between 170-190°C.

Apply 2,0-2,5 gr/meter MAT70 on each side of the spacer, with a sealing depth of minimum 4 mm for best sealing. Pay attention that the silicon coated polymeric foil is removed completely. If parts of foil remain on surface it may cause blockings of the extruder pipes and nozzles. Clean the nozzles after each block of MAT70. Do not touch MAT70 with hand after application to spacer, this may cause lack of adhesion. Do not use silicon containing gloves during application. For best adhesion the spacer and glass surfaces should have a temperature of 15-25°C.

Spacer ends where straight and corner connectors are inserted should be prefilled with MAT70 appr. 6 grams each end. If pressed on the glass surface replacing may reduce the adhesion strength and the sealing quality is reduced. Hot application to glass/spacer surfaces by automatic applicators improve the sealing quality. For coated glass applications the coatings should be removed mechanically.

If warmedge spacers made of polymer material are used remind the contact of MAT70 with polymer surface, polymer compounds may contain ingredients (like peroxides) which attack chemically PIB polymer system, which may increase the gas leakage.

Silicons containing mineral oils may cause melting of MAT70, which results flowing of MAT70. Please check the compatibility of used silicons for montage of IG units and windows with MAT70. Stainless steel surfaces have generally lower adhesion ability, temperatures of 20-25°C are requested. Higher application temperatures increase adhesion, flow rate of MAT70.

STORAGE

FROST-SENSITIVE

None. Material must be stored at application conditions prior to use to avoid condensation.

RECOMMENDED STORAGE TEMPERATURE

+10°C to +30°C. Must be protected from direct sunlight and/or thermal radiation. Storage at temperatures below +10°C and above +30°C does not cause damages to the product, but requires a control of initial moisture value.

SHELF LIFE

2 years in original packaging.

HAZARD INDICATIONS SAFETY RECOMMENDATIONS TRANSPORT REGULATIONS

See Safety Data Sheet

PACKAGING

	1,0 kg
metallic can	2,5 kg
carton bobbin	7,4 kg

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. Analysis results and all information regarding state and suitability of our products are only guidelines with no obligation on our part. In addition, our General Sales and Delivery Conditions are applicable.

Warranty Information: POLY-CHEM warrants only that its product will meet its technical specifications. POLY-CHEM shall in no event be liable for incidental or consequential damage. POLY-CHEM's liability expressed or implied is limited to the stated selling price of any goods found defective. This Technical Data Sheet supersedes all previous editions.