

Technical Data Sheet

PT All-in-1 PLUS

Black primer for improving the Adhesion of Direct Glazing Adhesives/Sealants

Base: Polyurethane

Product Description

PT All-in-1 PLUS is a black, highly liquid primer/ activator based on polyurethane. It contains solvent. The product is outstanding for its good covering capacity and its excellent UV stability; it does not contain chlorinated hydrocarbons or aromatics. PT All-in-1 PLUS is also suitable as corrosion protection for small flange damages.

Application Areas

The use of PT All-in-1 PLUS as a primer is indispensable for PT 200 PLUS FC, PT 290 PLUS HM/LC, PT COLD PLUS HV/HM/LC and other PUR adhesives/sealants from PT, to promote adhesion in direct glazing to glass and glass ceramics. PT All-in-1 PLUS can also be used as activator for PUR-coated glasses and for remaining beads.

PT All-in-1 PLUS is also suitable for promoting the adhesion of other PUR adhesives/sealants to glass, various plastics and metals (trials must be carried out prior to use).

Technical Data

Colour:	black
Odour:	smells of solvent
Consistency:	thin liquid
Density:	approx. 0.98 g/cm ³
Solids:	approx. 35%
Viscosity (DIN 53019-1, 23 °C/50% rh)	approx. 10 mPas
Preferred coating thickness:	25 µm wet
Evaporation time on glass, ceramic layer, paint:	approx. 5 minutes
Evaporation time on encapsulation and remaining beads:	approx. 15 minutes
Primer activity on encapsulation and remaining beads:	up to 60 minutes after application
Primer activity on glass:	up 8 hours after application
Application temperature:	0 °C to 30 °C
In service temperature range:	-40 °C to 90 °C
Short exposure (up to 1 h.):	120 °C

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.

1. Surface pre-treatment

The substrates to be bonded must be dry and free from oil, dust, grease and other dirt.

Glass, glass with a ceramic coating, encapsulation and painted surfaces are cleaned with a solvent based or alcoholic cleaner and then checked for any damages. To obtain an optimal adhesion we recommend abrading the windscreen's bond line with a smooth abrasive pad in order to have clean surface. Clean the bonding surfaces with a solvent-based cleaner after abrading and allow to dry for 2 minutes. Alternatively you can also use alcoholic cleaner (Attention: Evaporation time: 10 minutes). The layer remaining in the window cut-out need not to be cleaned (see below). If, however, cleaning of this remaining layer is indispensable, an evaporation time of at least 2 minutes has to be observed before the sealant can be applied, since the adhesive surfaces must have fully dried.

Important: Do not apply primer to freshly painted surfaces, as adhesion problems may occur if not dried correctly. Please consult the regulations of the paint producer!

2. Preparation

Prior to use, shake the aluminium flask vigorously by hand for at least 1 minute after mixing ball is released. The steel ball is provided in the bottle to assist mixing.

3. Processing

PT All-in-1 PLUS is applied using an applicator (wool dauber) or a brush. The best application temperature for the primer is between 0°C and 30°C. It should be applied thinly and evenly. Uneven application may significantly prolong the evaporation time and - should the evaporation time be too short - lead to undesirable inclusion of solvent. A new coat of primer dissolves the layer applied before which has already started to dry and should, therefore, be avoided. This could have detrimental effects on both adherence and appearance.

Important

Since PT All-in-1 PLUS is a reactive, solvent-containing product, the bottle should be closed immediately after the primer has been used, in order to avoid undesirable reactions.

The following recommendations have proved suitable:

- A primer which has obviously thickened is tainted and should no longer be used for processing.
- Primer bottles, once opened and closed, should be used within two weeks.

Storage

Frost-sensitive:	no
Recommended storage temperature:	15 °C to 25 °C
Shelf life:	12 months in original packaging

Container/packaging units

PT All-in-1 PLUS is supplied in 30 ml, as well as in 100 ml and 250 ml single containers/aluminium bottles. One case contains 12 individual bottles à 30 ml or 250 ml or 10 individual bottles à 100 ml.

Hazard Indications/ Safety Recommendations/ Transport Regulations

see Safety Data Sheet

This Technical Data Sheet supersedes all previous editions.

Disclaimer

Note:

The above information, in particular the suggestions for processing and use of our products, is based on our knowledge and experience in standard cases. To ensure that the above information in the technical data sheets can be complied with and the respective product used or processed properly, the products need to be stored correctly. In addition, the above information reflects our state of knowledge at the time of printing this note. We are constantly striving to improve our products, and as such reserve the right to make changes to product specifications and processing instructions. The most current technical data sheet at the time of processing/application shall apply. The user must therefore always check the suitability of the products for the intended application and obtain advance information of any changes to the product specifications at PMA/TOOLS. We would like to point out the following: In particular where our products are processed and used without observing the product specification and without complying with the current processing instructions, there will be no warranty for the processed or used product unless the customer (who processed the product) can prove that an alleged defect of the product was already present (i.e. independent of processing or use) when the risk passed from us to him as the customer. Due to the different materials, substrates and different working conditions when processing or using the product, no liability for any working results will be accepted in other regards, except where that we have provided an express assurance for a working result. We would like to point out that any such additional assurance would have to be presented and, if necessary, proved by the party relying on it, i.e. by the party asserting a warranty. In all other respects, our general terms and conditions apply.