

Vitralit® UV 2113 is a product for Bonding/ Sealing/ Encapsulation of plastics as well as glass, metals or FR4 to protect sensitive parts against mechanical and environmental stresses.

Vitralit® UV 2113 is very strong, highly filled to give low CTE. Low shrink, tough dry surface after very fast cure. Can withstand welding and very high temperatures.

Shelf life:

Store in original, unopened containers for 6 months at max. 25°C

Technical Data

Color	grey
Resin	Epoxi-Acrylat
Filler	approx. 35% quartz

UNCURED PROPERTIES

Viscosity(25 °C / Brookfield LVT /Sp. / UPM)	PE-Norm P001	19000 to 32000
Flash point [°C]	PE-Norm P050	> 100
Density [g/cm³]	PE-Norm P003	approx. 1.05
Refractive Index [nD20]	PE-Norm P018	1.51

Curing

UV(UV-A 60mW/cm² in 0,05mm): [sec.]	PE-Norm P002	2
Visible Light (d= 0,05 mm) :[sec.]	PE-Norm P037	20
Full Strength [hours]	PE-Norm P032	12
Depth of Cure [mm]	PE-Norm P033	7

CURED PROPERTIES

Temperature Resistance [°C]	PE-Norm P030	-40 to 150
Hardness [Shore D]	PE-Norm P052	70 to 80
Shrinkage [Vol-%]	PE-Norm P031	2
Water Absorption [mass-%]	PE-Norm P053	< 0.15
Tg [°C] (DSC)	PE-Norm P009	50 to 60
CTE [ppm/K]	PE-Norm P017	52

Our data sheets have been compiled to the best of our knowledge. The information included in our data sheets is exclusive information for the intended user and describes characteristics, with no declaration of commitment. We recommend trials in order to confirm that our products satisfy the particular application requirements. For an additional technical consultation, please contact our RD department. In general, for guarantee claims, please refer to our standard terms and conditions.

**Adhesives
and more...**

Mechanical Data

Compression Shear Strength (Glass/Glass) [MPa]	[PE-Norm P061]	approx. 10
Compression Shear Strength (Glass/Alu) [MPa]	[PE-Norm P061]	approx. 12
Compression Shear Strength (Glass/Stainless Steel) [MPa]	[PE-Norm P061]	approx. 13
Lap Shear Strength (PC/PC) [MPa]	[PE-Norm P013]	approx. 7
Lap Shear Strength (PC/Stahl) [MPa]	[PE-Norm P013]	approx. 7
Lap Shear Strength (PC/FR4) [MPa]	[PE-Norm P013]	approx. 6
Elongation at Break [%]	[PE-Norm P060]	approx. 9
E-Modul [MPa]	[PE-Norm P056]	1345

Surface Preparation

The surfaces to be adhered should be free of dust, oil, fat or any other dirt in order to optimise reproducible bonds. Lightly soiled surfaces can be cleaned with isopropyl or ethanol, whereas substrates with low surface energy (such as polyethylene, polypropylene or Teflon) need to be treated physically using plasma or corona to create a suitable working surface. For glass bonding applications we have developed a special primer pen which can be easily applied to prepare the surface for best results.

Application

Our products are delivered ready for use. As soon as you receive them, you can dispense them, be it by hand from the container, or semi/fully automatically. When applied automatically, we recommend the use of air pressure with the appropriate cartridge/piston combination to dispense the adhesive at the required speed and accuracy. If help is required, please consult our engineering department.

Please read the corresponding **Safety Data Sheet** for this product.

Adhesives
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