



TECHNICAL DATASHEET

Vitralit® VBB-1

Vitralit® VBB-1 is a UV/visible light curable, multi-substrate bonder that exhibits excellent peel strength. The cured product is optically clear, exceptionally flexible and demonstrates outstanding elongation.

Vitralit® VBB-1 is recommended for applications where a tough, durable and moisture resistant bond is required. Because of the ability to bond to many substrates and ability to withstand the stress of thermal cycling.

Vitralit® VBB-1 is very well suited for use as a UV curable potting composition.

Vitralit® VBB-1 contains no acid, hazardous materials or corrosive ingredients.

Shelf life:

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

Technical Data

Color	transparent
Resin	Urethan Acrylat

UNCURED PROPERTIES

Viscosity (Brookfield LVT/25°C) [mPa*s]	PE-Norm P001	1000 to 1500
Flash point [°C]	PE-Norm P050	> 93
Density [g/cm ³]	PE-Norm P051	approx. 1.1
Refractive Index [nD20]	PE-Norm P018	1.4718

Curing

UV(UV-A 60mW/cm ²): [sec.]	PE-Norm P002	10
Visible Light (9W Röhre) :[sec.]	PE-Norm P037	60
Full Strength [hours]	PE-Norm P032	12
Depth of Cure [mm]	PE-Norm P033	5

CURED PROPERTIES

Temperature Resistance [°C]	PE-Norm P030	-50 to 150
Hardness Shore A	PE-Norm P052	70 to 80
Shrinkage [Vol-%]	PE-Norm P031	2.4
Water Absorption [Gew-%]	PE-Norm P053	< 0,8
TG DSC [°C]	PE-Norm P009	> -45

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 (PC/PC) [MPa]	[PE-Norm P061]	approx. 2,1
Compression Shear Strength (PC/PMMA) [MPa]	[PE-Norm P061]	approx. 2,5
Compression Shear Strength (PC/FR4) [MPa]	[PE-Norm P061]	approx. 2,4
Lap Shear Strength (Glass/Glass) [MPa]	[PE-Norm P013]	approx. 5,7
Lap Shear Strength (Glass/Alu) [MPa]	[PE-Norm P013]	approx. 3,4
Lap Shear Strength (Glas/Stahl) [MPa]	[PE-Norm P013]	approx. 2,6
Elongation at Break [%]	[PE-Norm P060]	approx. 204

Instructions for Use

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 Reiniger IP®, 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
and more...