

Vitralit® 1691 is a uv- as well as thermally-curing, black dyed Glob-Top substance. It is known for it's high ionic purity (Na+ < 10 ppm, K+ < 10 ppm, Cl- < 10 ppm) and shows extrem temperature resistance.

Compared to the customary fillers Vitralit® 1691 offers a fast uv- surface fixation. The following short post curing process with radiation implies, that there is no limit to the layer strength. Under perfect storage conditions (+5° C/ no uv- radiation), kept in closed original containers, Vitralit® 1691 can be stored for about six months.

shelf life:

in closed original packing unit at 5°C without UV- irradiation -- 6 months --

Technical Data

Color	black
Resin	epoxy
Filler	approx. 50% quartz

UNCURED PROPERTIES

Viscosity (Brookfield LVT/25°C) [Pa*s]	PE-Norm P001	280 to 310
Flash point [°C]	PE-Norm P050	> 100
Density [g/cm³]	PE-Norm P051	approx. 1.5

Curing

UV(UV-A 70mW/cm² OF trocken): [sec.]	PE-Norm P002	120
Thermal Curing 110°C :[Min]	PE-Norm P035	2
Full Strength [hours]	PE-Norm P032	24
Depth of Cure [mm]	PE-Norm P033	1

CURED PROPERTIES

Temperature Resistance [°C]	PE-Norm P030	-40 to 180
Hardness Shore D	PE-Norm P052	80 to 90
Shrinkage [Vol-%]	PE-Norm P031	1.4
Water Absorption [Gew-%]	PE-Norm P053	< 0,2
TG DSC [°C]	PE-Norm P009	100 to 120
Thermal Expansion [ppm/K]	PE-Norm P017	75
Dielectric Constant [10kHz]	PE-Norm P054	3.4
Thermal conductivity [W/mK]	ASTM 1530	0,6

Our data sheets have been compiled to the best of our knowledge. The information included in our data sheets is exclusive information for the tended 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...

UV-epoxy, filled, dual- curable:

- storage at max. 5°C
- before using acclimate to room temperature in original packing unit
- applicable with dispenser, automatic dispenser... e.g. such systems are applied with machines from Mühlenbauer, Schiller, Esec or Ruhamat.
- surfaces to be bonded should be free of dust, oil, fat or any other dirt
- curing wave- length from 315nm to 400nm

Curing time depends on:

- emission spectrum and intensity of emitter but min. 30mW/cm²
- distance from emitter to substrate
- emitter intensity aging
- layer thickness
- material influence like reflection, adsorption, UV permeability ...

This product is dual curable, i.e. deep layers thickness or shadow areas can be thermal cured afterwards.

Adhesives
and more...