



Vitralit®
UV and light-curing adhesives

The Vitralit® system

- UV acrylates
- Light-curing acrylates
- UV epoxides
- Light-curing epoxides
- UV polyester

System properties

- Single-component systems
- Short production times
- Solvent-free
- Low energy costs
- Excellent electrical properties
- Outstanding temperature and chemicals resistance

The Vitralit® system – a comprehensive product range for numerous applications...

Our comprehensive range of Vitralit® systems covers a multitude of applications and offers many advantages: Vitralit® systems are used in many fields in both trade and industry. Vitralit® adhesives and sealants are single-component systems that cure within the space of only a few seconds.

The main advantages of the Vitralit® systems are:

- Simple dosing, immersion, spray, roller application, etc;
No mixing of several components and no pot life
- Depending on the application, curing times of 0,5 to 60 seconds can be achieved through exposure to high-energy UV light. This facilitates shorter cycle times also in mass production
- Solvent-free, therefore environmentally safe

- Low energy costs due to short curing times
- Excellent electrical properties
- Outstanding temperature and chemicals resistance
- Low heating

The short UV exposure time allows bonding of temperature-sensitive materials. With their low space requirement, the Vitralit® systems are ideal even for complex fully-automated high-volume production lines and can be well integrated in existing plants.

Contact us for advice about the ideal Vitralit® product for your particular application, complete with all technical specifications.

Electrical engineering/electronics							
Vitralit®	2009 F	4451	1691	1657	6104 VT	6129	6138
Typical applications	Conformal Coating	Conformal Coating, Foil bonding	Glob-top	Glob-top sealant for large/high parts	Corner bonding, Mounting large parts on PCB	Die-Attach, Heat sink bonding	Die-Attach, Heat sink bonding
Viscosity (mPas)	70 - 150	600 - 800	280000 - 310000	120000 - 130000	80000 - 90000	30000 - 40000	150000 - 170000
Temperat. resist. (°C)	-40 to +180	-40 to +130	-40 to +180	-50 to +150	-40 to +200	-40 to +180	-40 to +180
Curing	UV	UV	UV / thermal	UV	UV / thermal	UV / thermal or with activator	UV / thermal
Colour	Transparent	Transparent	Black	Light grey	Translucent	White	White
Characteristics	Flexible, Excellent chemicals resistance	Quick curing, Low shrinkage, very elastic	High ion pureness, Excellent temperature resistance	Low ion content, Quartz-filled, Thixotropic, Flexible	High temperature resist., Good adhesion on metals and sintered materials	High chemicals resist., Good adhesion to glass, aluminium, ceramics	High chemicals resistance, Good heat conductivity, Spacer 40µ

Potting							
Vitralit®	2655	2665	1722	6104	UD 5134	6128	4282 mod2
Typical applications	Flip-chip underfiller	Flip-chip underfiller	Sealing of plugs, Switches and relays, Parts on FR4	Sealing rotors and sensors	Bonding, Sealing, Encapsulating el. parts	Adhesive/ sealant for switches, Plugs, Relays	Ferrite bonding, Screw and thread-locking adhesive
Viscosity (mPas)	200 - 400	3000 - 5000	5000 - 8000	3500 - 6000	15000 - 25000	800 - 1200	500 - 600
Temperat. resist. (°C)	-50 to +150	-55 to +175	-40 to +120	-40 to +200	-40 to +150	-40 to +150	-40 to +170
Curing	UV / thermal	UV / thermal	UV	UV / thermal	UV / thermal	UV / thermal & activator	UV / Activator
Colour	Transparent	Transparent	Pink transparent	Translucent	Grey-yellow, Viscous	Translucent	Light green
Characteristics	Low shrinkage and small CTE, Good capillary behaviour, High ion purity	Cationic, Extremely reliable in aerospace applications, Low CTE	Good adhesion to thermoplastic synthetics, Low shrinkage	High temperature resist., Good adhesion on metals and sintered materials	UV- and thermally curing	Good adhesion to many materials, Various viscosities possible	Anaerobic curing in shadow zones, Good adhesion to metals

Smart cards							
Vitralit®	UC 2017	1600 LV	1600 LV black	1650	1680	1688	1671
Typical applications	Sealing of plugs, Switches and relays, Fixing parts	Glob-top sealant for larger chips	Glob-top sealant for larger chips	Glob Top, covering of small dies	Glob Top, covering of small dies	Glob Top, covering of small dies	Dam compound
Viscosity (mPas)	150000 - 180000	5000 - 6000	5000 - 6000	6000 - 9000	6000 - 9000	3000 - 4000	250000 - 300000
Temperat. resist. (°C)	-40 to +150	-40 to +180	-40 to +180	-40 to +150	-40 to +150	-40 to +150	-40 to +180
Curing	UV	UV / thermal	UV / thermal	UV	UV	UV	UV / thermal
Colour	Transluc./Reddish	Grey	Black	Grey	Grey	Grey	Grey
Characteristics	Thixotropic, Gap-filling, Low heat expansion	High chemicals resistance, High Tg, High strength	High chemicals resistance, High Tg, High strength	Flexible, Low water absorption, Grain size up to 150 µm	Flexible, Low water uptake, High ion purity, Small grain size of max. 12µm	Flexible, Low water uptake, High ion purity, Small grain size max. 12µm, Good flow char.	Stable, Wet-on-wet application with filler material, Ion-free

	Dome coating		Loudspeakers		Wire tacking		FiPG
Vitralit®	UC 6772	UV 3675	UV 2097	UV 2100	9187	9179	2583
Typical applications	Epoxy-based dome coating	Epoxy based dome coating	Plastics and metals, For bonding loudspeakers	Bonding plastics	Wire tacking, Coil wire fixation	Wire tacking, Bonding and sealing electric. components	Form-in-place gaskets, Liquid gasket
Viscosity (mPas)	200 - 400	200 - 400	4000 - 6000	200 - 600	800 - 1200	200 - 400	65000 - 75000
Temperat. resist. (°C)	-40 to +150	-40 to +160	-40 to +150	-40 to +150	-40 to +120	-40 to +150	-40 to +180
Curing	UV	UV	UV / thermal	UV / thermal	UV	UV	UV
Colour	Clear, Colourless	Clear, Colourless	Colourless	Colourl./Re-Act red	Yellowish, Transpar.	Yellowish	Transparent
Characteristics	Dome coating with optimised flowing behaviour	High-strength, Scratch-resistance, High-gloss surface	Also available with Re-Act	High ultimate elongation	Quick curing, Good adhesion to PC, PVC and PMMA	Good adhesion to many plastics like PC, PMMA and PVC and coil coatings, Fast curing	Dry surface, Good tensility, Good resetting capacity

Glass bonding

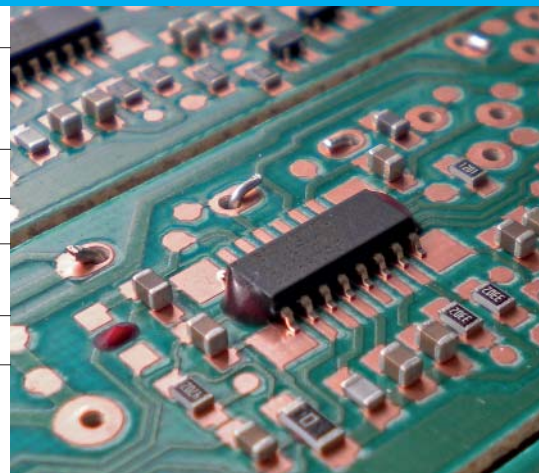
	6128		UV 2771	6133	7561	7562	UV 2725	VBB-N
Typical applications	Glass-metal/stone/marble, Thermo-plastic materials		Hard glass-glass/metal (alu/st. steel), temp./lam. glass	Glass-metal/stone, lamin./temp.glass-metal, hard mat.	Humidity resistant Glass bonder, Solar modules	Glass/PC, Glass/laminated glass/tempered glass	Large-surface glass-glass/metal/stone	Bevelbonder, Opt. Filter, Suitable for bonding large glass areas
Viscosity (mPas)	550 - 1000		2.000 - 3500	600 - 1000	500 - 850	500 - 800	200 - 400	50 - 150
Temperat. resist. (°C)	-40 to +150		-20 to +120	-20 to +120	-40 to +150	-40 to +150	-20 to +140	-40 to +140
Curing	UV	Thermal (120°C)	UV VL (LED 395)	UV VL (LED 395)	UV	UV VL (LED 395)	UV	UV VL (LED 395)
Colour	Transparent		Clear, Colourless	Clear, Colourless	Clear, Colourless	Clear, Colourless	Clear, Colourless	Clear, Colourless
Characteristics	Also combination curing (UV/heat), High strength and impact-resistant		Impact resistant UV resistant, No yellowing, Dry surface	LED-optimised curing, High strength and impact-resistant	Water resistant - and dish washer proofed	Flexible, For large-area bonds, Very low moisture absorption	High elongation at break, Very elastic, Good resistance to peeling	Particular humidity resistant, UV resistant, No yellowing

Medical equipment

	7041 F		1702	6108 T	7641	4731	4731 VT	VBB1
Typical applications	Needle Bonder, Connecting of tubes, Fitting and housings made of plastics		Medical plastics bonding, USP class VI	For glass/metal, USP class VI, ISO 10993	PMMA and PC edge-to-edge bonding	PMMA, PC and glass surface bonding	PMMA, PC and glass surface bonding	Glass bevel bonds, Elast. edge-to-edge bond., Plastics/glass
Viscosity (mPas)	50 - 90		70 - 200	4000 - 6000	50 - 100	900 - 1500	22.000 - 28000	1000 - 1500
Temperat. resist. (°C)	-40 to +120		-55 to +135	-40 to +160	-30 to +120	-30 to +120	-40 to +120	-40 to +150
Curing	UV	VL (LED 395)	UV	UV / VL / thermal & activator	UV VL (LED 395)	UV VL (LED 395)	UV VL (LED 395)	UV VL (LED 395)
Colour	Slightly yellow		Amber	Transparent	Clear, Colourless	Clear, Colourless	Clear, Colourless	Clear, Colourless
Characteristics	Capillary flow, Good adhesion when bonding PC to glass, metal and many other plastics		Good adhesion to plastics, Gas and irradiation sterilisation	Multifunctional, Excellent adhesion, Resistant to yellowing	LED-optimised curing, Excellent capillary action, High strength	LED-optimised curing, Elastic, Surface bonding PC and PMMA	LED-optimised curing, Elastic, Surface bonding PC and PMMA, high viskose thixotr. gel	LED-optimised curing, High flexibility, Good resistance to peeling

Optics

	UC 1608	UV 2113	1507	UC 6215
Typical applications	Fiber optics, Lenses, Optical application	Thermoplastics	Chip fibre linking, FO cable bonding	Bonding, Sealing, Encapsulating electrical parts
Viscosity (mPas)	700 - 1250	19000 - 32000	350 - 750	600 - 1500
Temperat. resist. (°C)	-40 to +175	-30 to +120	-40 to +175	-40 to +180
Curing	UV	UV VL (LED 395)	UV	UV
Colour	Transparent	Grey-yellow	Transparent	Clear, Colourless
Characteristics	High Tg, Nano size fillers, High optical transparency	Good adhesion to many materials	Low insulation, High Tg, Nanostructured fillers	Resistant to intermediate high temperatures up to 230 °C



Products in suitable packing sizes



Dispensing equipment

We can supply the suitable dispensing equipment for your application, from standard devices to custom-made machines. Ideal for precisely metered application of various low- and high-viscosity materials.



We also have the suitable accessories.

You can find further information about our product groups in our special product data sheets. For our comprehensive range of accessories for each product series, please ask for our detailed information sheets.

UV lamps / UV LEDs

Hönle UV lamps

are the ideal addition to our Vitralit® UV products and are ideally suited for curing adhesives, coatings, sealants and paints.

- UV hand lamps
- UV point sources
- UV flood lamps
- UV conveyors

Handy and compact, suitable for mobile and stationary systems, with homogeneous intensity distribution.



Hönle UV LED lamps

UV LED arrays and UV LED flood lamps: the innovative UV technology that cures without heat generation!

Ideal in combination with the specially developed Panacol UV LED adhesives.



The Hönle UV LED arrays are available in a range of lengths and provide an even energy density over their whole length.

hönle group		Dispensing	Curing	UV-adhesives	Conductive adhesives	Potting
aladin	eleco-efd	eltosch	hönle	mitronic	panacol	printconcept
						uv-technik speziallampen



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