


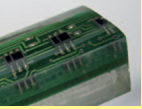

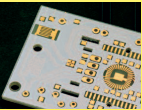

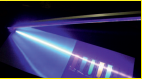


Outdoor applications, such as signal lamps, information panels, motor vehicle lights, etc., are exposed to exceptional climatic influences. We have developed special products for this application field that not only protect against environmental influences but also fulfil highest functional and optical demands like very high transparency or light diffusion.

Application	Requirement/special product properties	ELPELIGHT® product
conformal coating of optical assemblies such as sensors or LEDs   	<ul style="list-style-type: none"> <li>high transparency and yellowing resistance</li> <li>individual transparent colouring in red, green or blue</li> <li>water-thinnable and fast drying</li> </ul>	conformal coatings of the series ELPEGUARD® SL 1305 AQ-ECO
	<ul style="list-style-type: none"> <li>high transparency and extremely high yellowing resistance</li> <li>fastest drying and easy repair - also available in handy spray tins</li> </ul>	conformal coatings of the series ELPEGUARD® SL 1307
	<ul style="list-style-type: none"> <li>high transparency and yellowing resistance</li> <li>combined with diffusor ink EH 13.400 UV extends the scattering angle of LEDs</li> <li>solvent-free, UV curing, shadow curing without additional temper step</li> </ul>	ELPEGUARD® thick film lacquers of the series TWIN-CURE® DSL 1600 E-FLZ
	<ul style="list-style-type: none"> <li>can be used at high temperatures up to 180 °C and under strong moisture stress, high chemical resistance</li> <li>addition cross linking; thermal curing; for thick film applications up to 3 mm</li> </ul>	ELPEGUARD® silicone thick film lacquer DSL 1705 FLZ
	<ul style="list-style-type: none"> <li>can be used at high temperatures up to 180 °C and under strong moisture stress, high chemical resistance</li> <li>condensation cross linking at room temperature; for thick film applications up to 300 µm.</li> </ul>	ELPEGUARD® silicone thick film lacquers of the series DSL 1706 FLZ
clear potting of optical assemblies 	<ul style="list-style-type: none"> <li>colourless and crystal clear, excellent transparency, for highest demands on optical properties, very good weather resistance, excellent UV light stability</li> <li>light diffusing effect or colouration by the addition of hazing paste or dyestuff concentrate</li> </ul>	Wepuran casting resins of the series VT 3402 KK
	<ul style="list-style-type: none"> <li>colourless and clear transparent, weather and UV resistant, very high elasticity and tear strength</li> <li>excellent temperature resistance up to 200 °C</li> </ul>	Wepesil casting resin VT 3601 E
opaque black or white potting of optical assemblies 	<ul style="list-style-type: none"> <li>applicable up to 90 °C, low-viscosity, black</li> </ul>	Wepuran casting compound VU 4443/61 HE
	<ul style="list-style-type: none"> <li>applicable up to 120 °C, low-viscosity, black</li> </ul>	Wepuran casting compound VU 4442/61 HE
	<ul style="list-style-type: none"> <li>applicable up to 90 °C, black, hardly flammable, extremely weather resistant</li> </ul>	Wepuran casting compound VU 4444/31 SB-WB
	<ul style="list-style-type: none"> <li>applicable up to 90 °C, white, even when exposed to intense sunlight only very slight yellowing</li> </ul>	Wepuran casting compound VU 4490/31 K
substrate coating, e.g. under LEDs 	<ul style="list-style-type: none"> <li>light reflection of the substrate by a „neutral“ white coating with solder masks (the falsification of a white LED can be effectively avoided), pure white colouration even after lead-free reflow, soldering and temper processes, also for flexible applications</li> </ul>	solder resists ELPEMER® SD 2491 SM-TSW-R1, photoimageable SD 2496 TSW, thermal curing SD 2490/201 UV-FLEX-HF, UV curing, flexible
	<ul style="list-style-type: none"> <li>avoid light reflection from the substrate by using a black solder resist; increased contrast to the LED</li> </ul>	solder resists ELPEMER® SD 2447 XM, photoimageable SD 2442 NB-M, thermal curing SD 2440/201 UV-FLEX-HF, UV curing, flexible
heat dissipation in optoelectronics 	<ul style="list-style-type: none"> <li>heat dissipation by screen- and stencil-printable pastes with high heat conductivity, excellent electrical insulating properties, extending the life cycle of LEDs</li> <li>compared to conventional processes: reduces the number and size of heat transition resistances</li> </ul>	heatsink pastes HSP 2740 (better chemical resistance) HSP 2741 (higher flexibility)
electroluminescent foils 	<ul style="list-style-type: none"> <li>screen printing pastes for the production of electroluminescent foils (plate or light condensator): These pastes are printed one over the other on customary ITO foils.</li> <li>When applying an AC voltage, light is emitted. The emitted light is absolutely homogeneous and, regardless of the spectator's perspective, it is always perceived as being of the same colour.</li> </ul>	active light emitting paste ORMECON EL 5400 dielectric paste ORMECON EL 5500 backelectrode paste ORMECON EL 5800