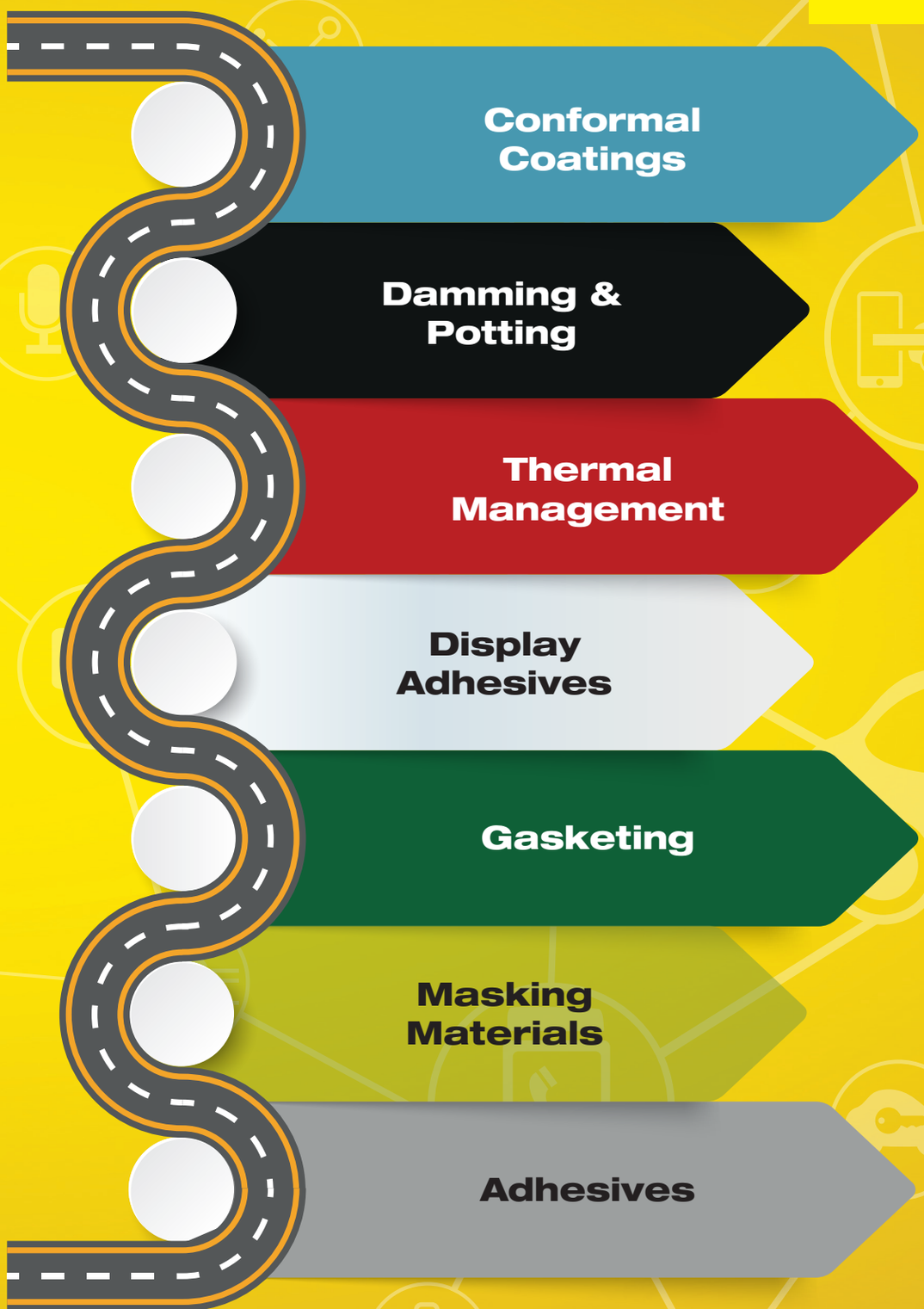
PRODUCT GUIDE

What's inside the machine?

Automotive

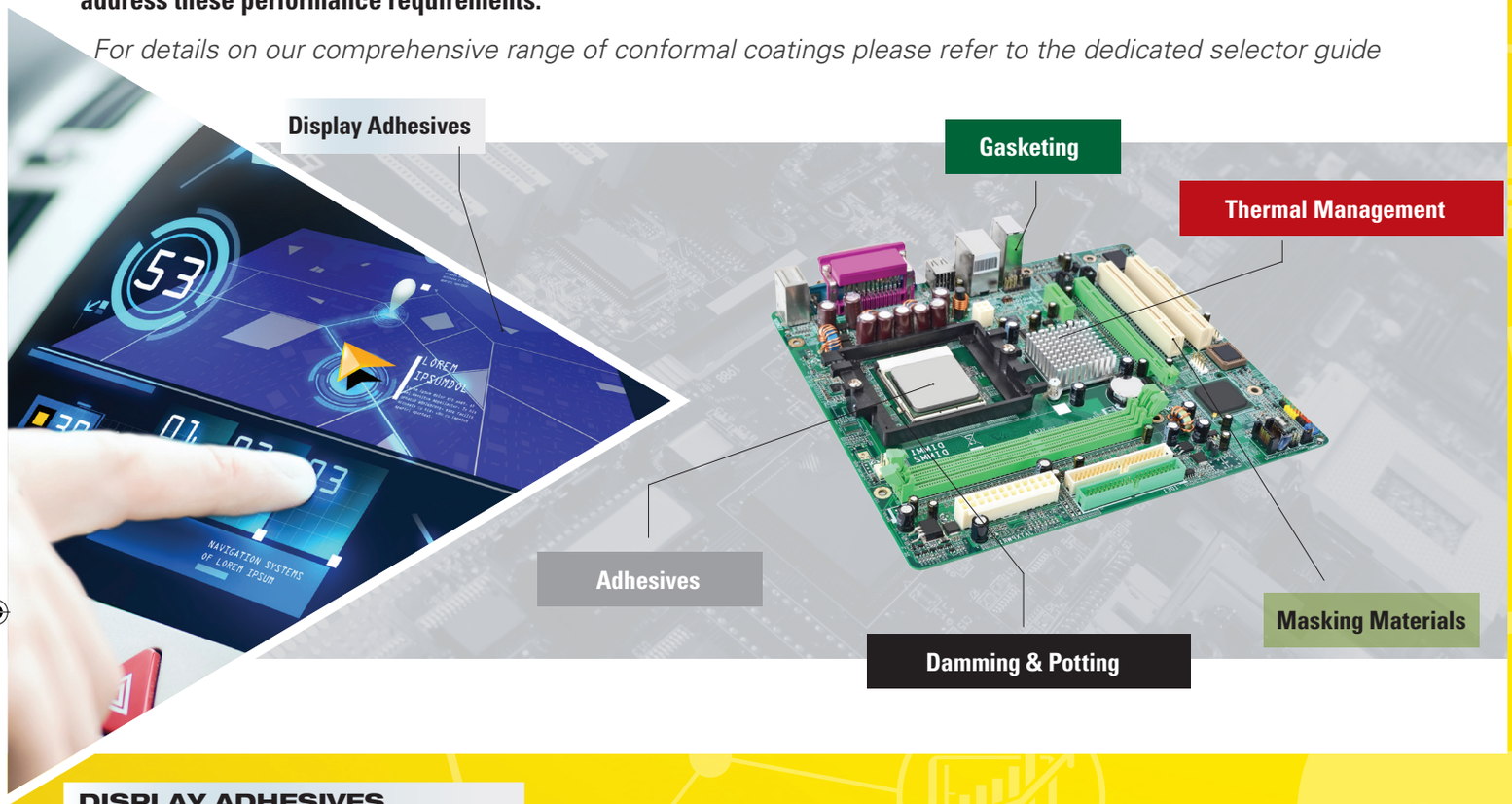


HumiSeal®

Automotive

Automotive electronic assemblies continue to become an increasingly sophisticated and important aspect of both the functionality and reliability of modern automobiles. These assemblies continue to be placed in ever more demanding end-use environments, where the risk of degradation in performance, due to extraneous factors such as humidity, salt- spray, noxious gases and other sources of corrosion continues to increase rapidly. HumiSeal's product portfolio is specifically designed to address these performance requirements.

For details on our comprehensive range of conformal coatings please refer to the dedicated selector guide



DISPLAY ADHESIVES

Product	Description	Cure	Durometer	Viscosity	Index of Refraction
LOCA51	High strength adhesive optically clear adhesive designed specifically to ruggedise displays. Low shrinkage and ultra-low mura.	UV cure	A25	2,000-3,500	1.44
LOCA52	Low viscosity and low shrinkage optically clear adhesive for thin application.	UV cure	A40	500-1000	
LOCA53	Fire retardant optically clear adhesive with low modulus for high reliability applications such as aviation. Low shrinkage for low mura.	UV cure	A28	4,000-5,000	1.48
LOCA59	Thixotropic optically clear adhesive paste for edge and damming applications	UV Cure	A45	Thixotropic Paste	

THERMAL MANAGEMENT

Product	Description	OPR Temp (°C)	Gel Time (min)	Cure Schedule	Durometer	Viscosity PT A	Viscosity PT B	Thermal Conductivity
2E40T-U	2 part thixotropic epoxy with thermal conductivity used in staking and securing of components. Very high bond strength to various surfaces.	-20 to 150	180	@25C 8hrs		79,000 to 295,000	60 to 150	1.02 W/mK
2C41T-G	2 part fast setting silicone thermal material designed for thermally demanding applications.	-65 to 200	10	@25C: 2hrs; @125C: 5min	39-43	10,000-35,000	10,000-35,000	3.8 W/mK
PSP43	Pre-cured silicone pads designed for thermal management of flat surfaces	-65 to 200	Pre-cured Gel		A50			3.5 W/mK

DAMMING & POTTING

Product	Description	OPR Temp (°C)	Gel Time (min)	Cure Schedule	Durometer	Viscosity PT A	Viscosity PT B
2E11-Y	2 part clear, epoxy potting material with variable hardness based on mix ratio. The non-corrosive nature, excellent bonding strength to multiple materials, and very good electrical properties are ideal for tough applications.	-40 to 155	60	12-24hrs @RT; 2hrs @70C; 1hr @100C	D64, D72, D80	10,000-12,000	14,000-16,000
2A10	2 part clear urethane potting material designed for light sensitive applications (LED, PV, etc). It is a UV stable, non yellowing, hard coat with low shrinkage that can withstand environmental conditions or high temperatures.	-50 to 110	3	3hrs @RT	D75	600-950	520-700
2E10-B	2 part black epoxy potting material. Specifically designed for industrial applications with adhesion to multiple surfaces. Dispenses easily with 60 min pot life.	-20 to 150	60	24hrs @25C	D85	5,200-7,200	12,000-14,000
2A11	2 part clear urethane soft sealant, FIP Gasketing material, and an encapsulant. Adhesion to various substrates makes it ideal for harsh environments and high vibration requirements.	-60 to 120	5-8	24hrs @25C	A53	11,000-15,000	2,000-3,000

ADHESIVES

Product	Description	OPR Temp (°C)	Gel Time (min)	Cure Schedule	Durometer	Viscosity PT A	Viscosity PT B
2E20	2 part fast setting bonding epoxy. Resistant to chemical/solvent attack and will adhere to wide variety of materials.	-60 to 125	5	1-6hrs @35C	D80	12,000-15,000	11,000-15,000
2A20	2 part urethane adhesive which upon cure retains very good flexibility. Quick setting will have moisture resistance, very low odor and can be used in an autoclave.	-50 to 100	8-10	12-24hrs @25C; 30-45min @65C	D45	7,000-11,000	1,000-2,000
2E22	2 part tough and fast setting bonding epoxy. Low odour with high resistant to chemical/solvent attack. Has very high peel strength.	-60 to 125	5	12hrs @RT	D74	30,000-100,000	3,000-4,000
2A23-G	2 part thixotropic urethane designed for staking and securing various components. Capable of withstanding low operating temperatures with excellent electrical insulating properties.	-50 to 120	3	10 min @RT	A90	1,000-1,300	6,000-9,500
2E24-W	2 part epoxy with high sheer strength for the use in mechanically destructive applications such as high vibration and shock. Easily dispensed with medium working life. Has excellent insulative properties with very good adhesion to metals and plastics	-10 to 140	20	24hrs @25C; 1.5hrs @65C; 0.5hrs @100C	D80	172000	13050
UV20Gel	100% UV curable single component non-sagging gel with low viscosity during flow. Easy application with material easily flow property during application and thixotropic immediately post application. Excellent bonder for various materials with high flexibility for mechanically destructive environments.	-50 to 120	UV Cure			Thixotropic	
UV21Gel	100% UV curable single component clear material designed for sealing components. Material applies easily, has very good surface wetting properties and becomes a strong adhesive upon cure.	-50 to 120	UV Cure			170-200	
1E31	One part fast heat cure, solder replacement conductive epoxy. This product is very simple to use and it features excellent electrical conductivity, high temperature and high resistance chemical attack.	-20 to 150		2hrs @120C	D80	Thixotropic	
2E31	General purpose two part conductive epoxy with room or elevated temperature cure. Meets NASA out-gassing spec. Ability to bond and seal multiple substrates while creating strong durable bond between dissimilar materials.	-60 to 125		24hrs @RT; 1hr @100C	D85	650	700
2E33	Extremely flexible two part conductive epoxy with a simple 1:1 mix ratio. This product features very good low temperature performance, is easily dispensed manually or for automation.	-50 to 155		24hrs @RT; 1hr @ 110C	D40	Thixotropic	Thixotropic

GASKETING

Product	Description	Chemistry	Colour	Durometer
SG64	Preformed fully cured silicone soft gel with self healing properties for low insertion force. Excellent for connector sealing. The grommet forms an instant environmental barrier in both hot and cold temperatures. A rapid seal is created without the delay of lengthy cure cycles.	Silicone	Blue	OO 50
SG66	Protection for multiway connectors and cable entries for sealing and corrosion protection. Automated assembly capable. Preformed fully cured silicone firm gel with self healing properties. Acceptable usage in all temperature environments.	Silicone	Blue	OO 60

MASKING MATERIALS

Product	Description	OPR Temp (°C)	Cure	Durometer	Viscosity
UV91	100% UV curable low viscosity masking material. Easy application for complex surfaces and cures with effortless UV cure. Simple removal.	-50 to 150	UV cure	A45	13,000-24,000
UV92	100% UV curable non-sag material for masking and damming applications. Wide range application methods and compatible with HumiSeal conformal coatings. Simple removal.	-50 to 150	UV cure	A43	30,000-150,000
UV93	100% UV curable low sag masking material. Soft after cure. Easily removable.	-50 to 100	UV cure	A43	Low Sag Paste

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What's inside the machine?

HUMISEAL®, THE WORLD'S LEADING FORMULATOR OF
PROTECTIVE COATINGS FOR ELECTRONIC CIRCUITS

CHASE
Electronic Coatings
We make a material difference