

DOW

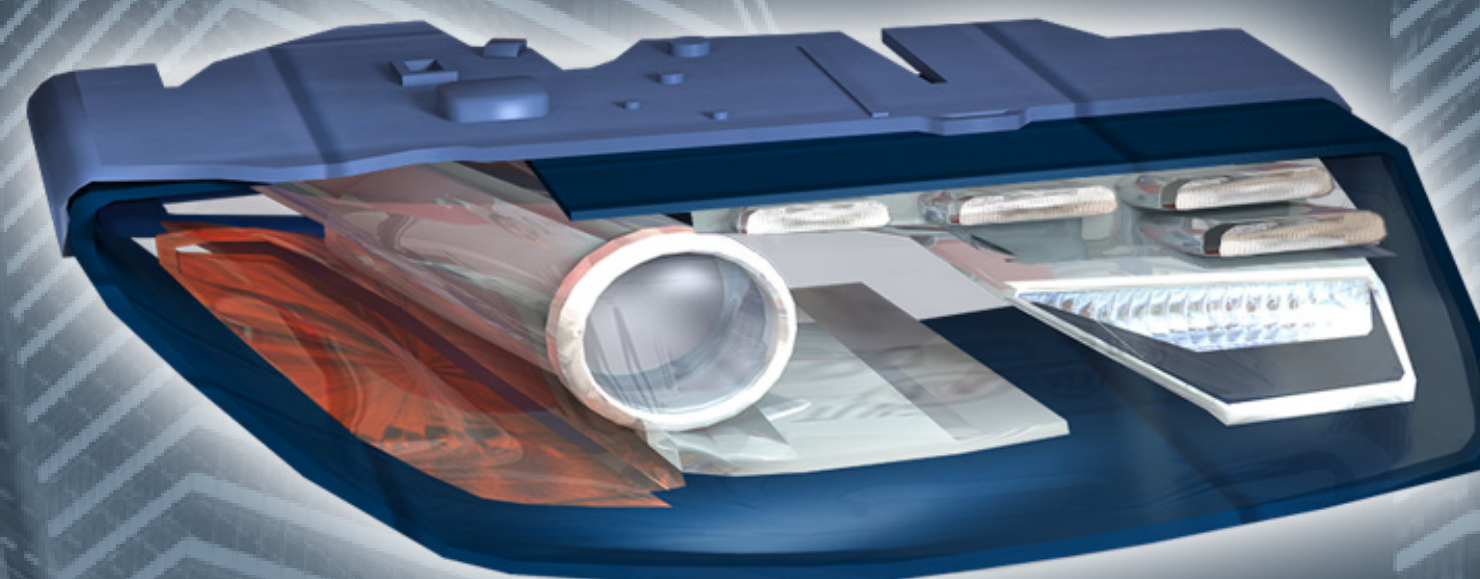
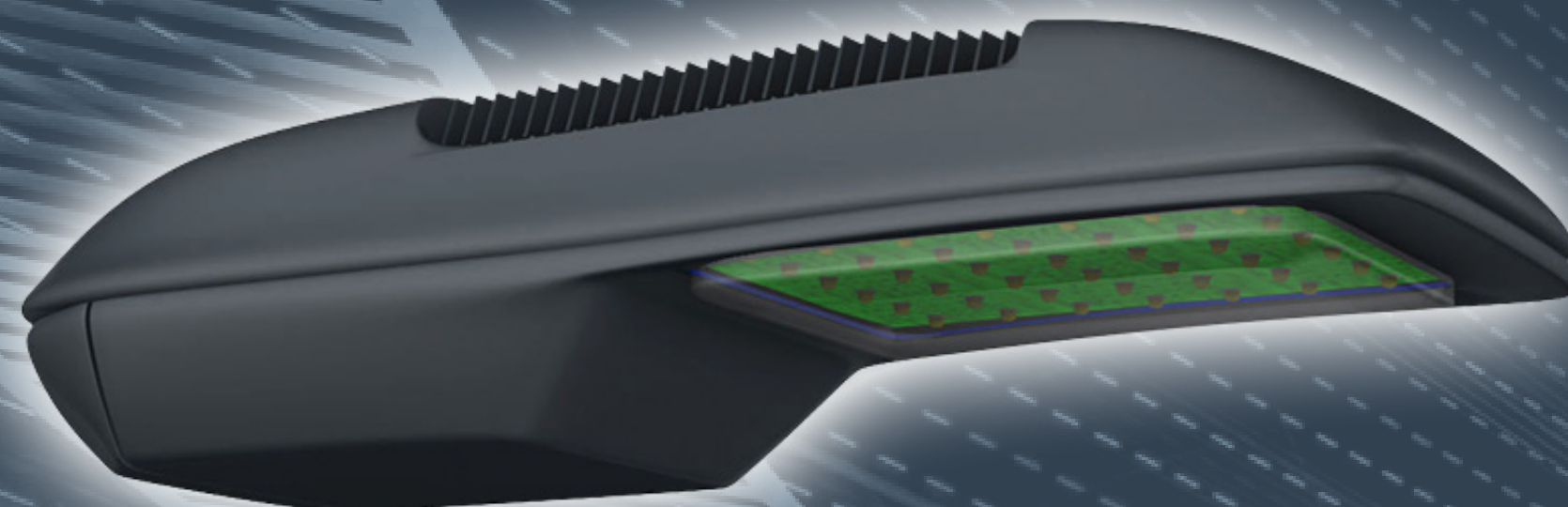
®

Imagine
a brighter future



TOUCH TO BEGIN

Protection, assembly and optical materials

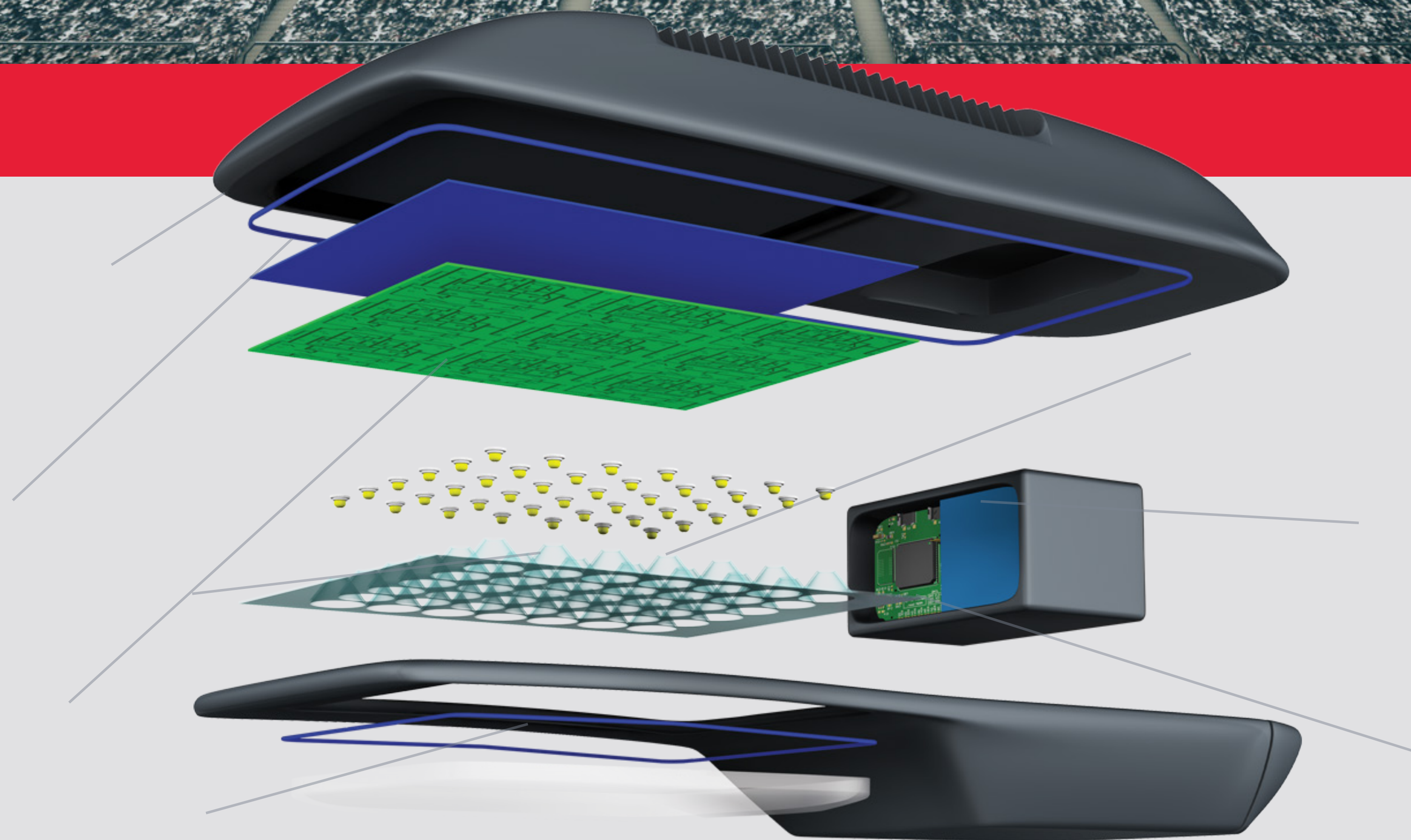


Brighter, more energy-efficient and longer-lasting lighting systems

The demand is everywhere. Innovative materials can help you meet that demand. Learn how Dow's high-performance silicones – and our lighting, technical, optical and process expertise – can help make your ideas brighter.

enLighten with Dow Silicones

Solutions for
LED Luminaires



Solutions for

LED Luminaires

Adhesives and sealants

By forming durable, low-stress elastomers, DOWSIL™ thermal adhesives and sealants increase your design flexibility, while providing reliable long-term performance. They offer excellent bonds and seals between a variety of common LED lamp and luminaire materials.

- ▶ DOWSIL™ 3-1944 RTV Coating
- ▶ DOWSIL™ 3140 RTV Coating
- ▶ DOWSIL™ 3165 Fast Tack RTV Adhesive Sealant
- ▶ DOWSIL™ 7091 Adhesive Sealant
- ▶ DOWSIL™ 832 Multi-Surface Adhesive Sealant
- ▶ DOWSIL™ EA-2900 Sealant
- ▶ DOWSIL™ EA 3500G Fast-Cure Silicone Adhesive
- ▶ DOWSIL™ EA-4900 White RTV Adhesive
- ▶ DOWSIL™ HM-2600 Silicone Assembly Sealant
- ▶ DOWSIL™ SE 9186 Sealant
- ▶ DOWSIL™ SE 9187 L Adhesive
- ▶ DOWSIL™ SE 9189 L RTV Adhesive

Learn more

How can Dow silicones help you meet your LED challenges?
Talk to a member of the [Dow team](#).

DOWSIL™
silicones by 

Solutions for

LED Luminares



Thermal interface materials

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- ▶ DOWSIL™ 3-6752 Thermally Conductive Adhesive
- ▶ DOWSIL™ EA-9189 H RTV Adhesive
- ▶ DOWSIL™ SE 4485 Thermally Conductive Adhesive
- ▶ DOWSIL™ SE 4486 Thermally Conductive Adhesive
- ▶ DOWSIL™ TC-4025 Dispensable Thermal Pad
- ▶ DOWSIL™ TC-5026 Thermally Conductive Compound
- ▶ DOWSIL™ TC-5080 Thermally Conductive Grease
- ▶ DOWSIL™ TC-5629 Thermally Conductive Compound

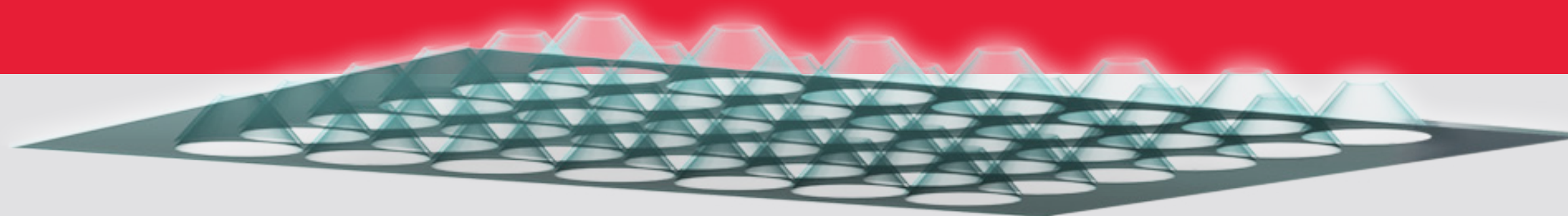
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DOWSIL™
silicones by 

Solutions for

LED Luminaires



Moldable optical silicones

You will find an unprecedented level of design freedom with moldable optical silicones from Dow. They allow you to explore more complex architectures – often while simplifying the manufacturing process.

They can also boost the long-term performance of your design. Not only do they offer excellent optical properties, they are more resistant to impact damage and degradation from UV, heat and environmental extremes than traditional optical materials – delivering high lumen density while remaining stable over time.

- ▶ [SILASTIC™ MS-0002 Moldable Silicone](#)
- ▶ [SILASTIC™ MS-1002 Moldable Silicone](#)
- ▶ [SILASTIC™ MS-1003 Moldable Silicone](#)
- ▶ [SILASTIC™ MS-2002 Moldable Silicone White Reflector](#)

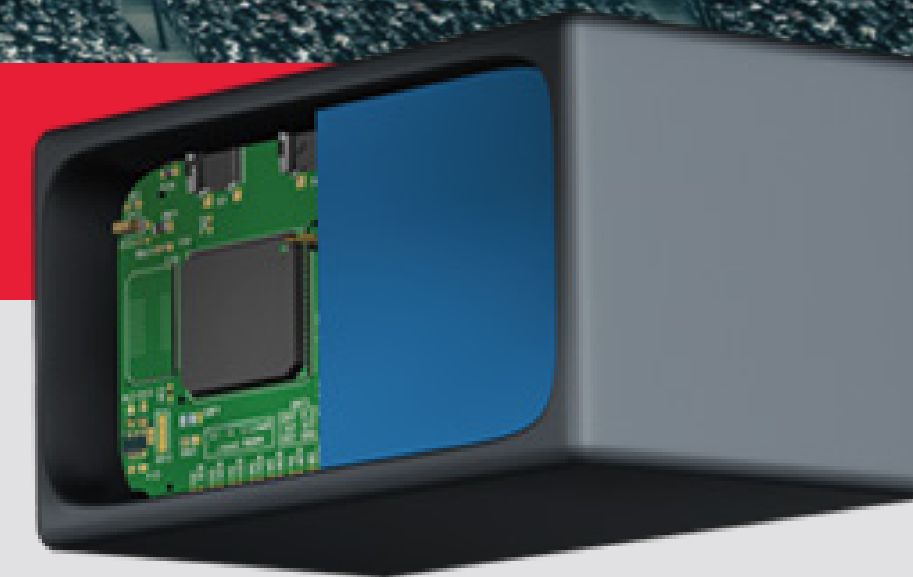
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SILASTIC™
silicone elastomers by 

Solutions for

LED Luminaires



Thermally conductive pottants

Environmental contamination and thermal damage are two of the biggest threats to the long-term reliability of your LED lamp or luminaire. DOWSIL™ and SYLGARD™ thermal pottants protect LED drivers from moisture and dust while dissipating heat and absorbing component noise.

- ▶ DOWSIL™ CN-8760 Thermally Conductive Encapsulant
- ▶ SYLGARD™ 160 Silicone Elastomer
- ▶ SYLGARD™ 164 Silicone Elastomer
- ▶ SYLGARD™ 170 Fast Cure Silicone Elastomer
- ▶ SYLGARD™ 170 Silicone Elastomer
- ▶ SYLGARD™ 567 Primerless Silicone Encapsulant

Learn more

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Solutions for

LED Luminares



Conformal coatings/gels

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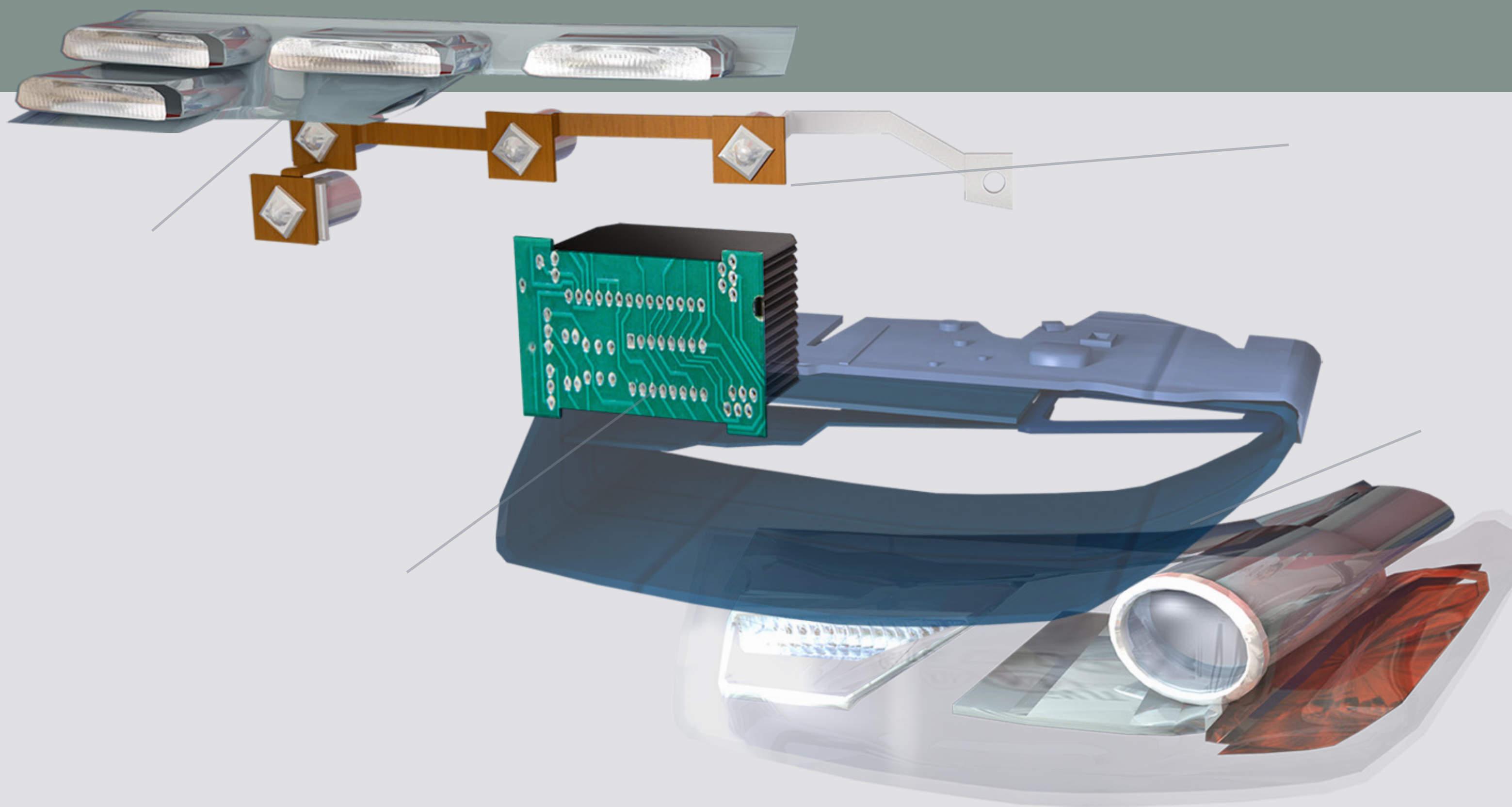
- ▶ DOWSIL™ 1-2577 Conformal Coating
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- ▶ DOWSIL™ 3-1944 RTV Coating
- ▶ DOWSIL™ 3-1953 Conformal Coating
- ▶ DOWSIL™ 3-4154 Dielectric Gel Kit
- ▶ DOWSIL™ 3-4207 Dielectric Tough Gel
- ▶ DOWSIL™ 3140 RTV Coating
- ▶ DOWSIL™ CC-2570 Conformal Coating
- ▶ DOWSIL™ CC-2571 Conformal Coating
- ▶ DOWSIL™ CC-3122 Conformal Coating
- ▶ DOWSIL™ EG-4131 Dielectric Gel
- ▶ SYLGARD™ 527 Silicone Dielectric Gel

Learn more

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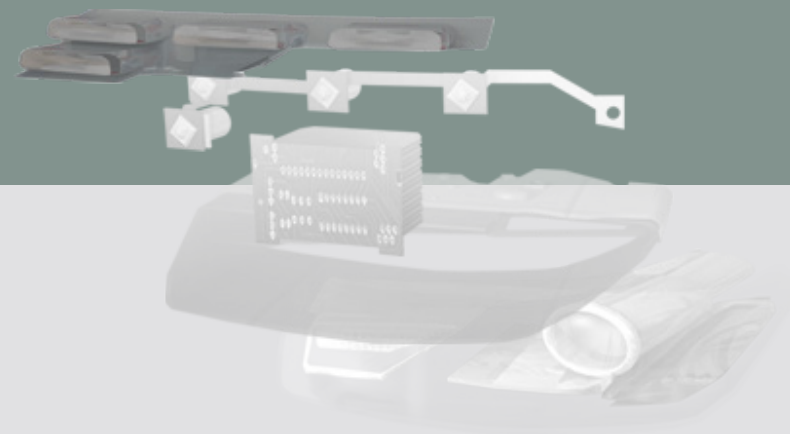
DOWSIL™
silicones by 

Solutions for
LED Headlamp assemblies



Solutions for

LED Headlamp assemblies



Lens/assembly

This is the business end of your headlamp assembly. Silicone adhesives, optics and reflective coatings from Dow offer you new freedom of design and increased performance – thanks to the unique properties of silicones and our global network of experts.

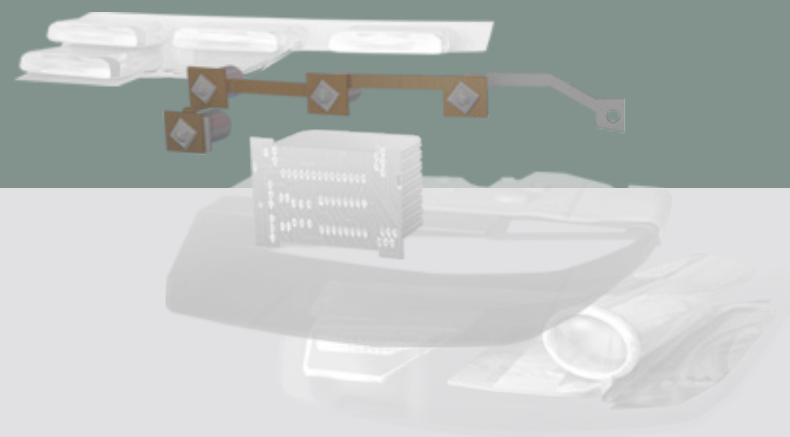
- ▶ Adhesives and sealants
- ▶ Moldable optical silicones
- ▶ Reflective material

Learn more

How can Dow silicones help you meet your LED challenges? Talk to a member of the [Dow team](#).

Solutions for

LED Headlamp assemblies



LED board

The nerve center of your LED assembly, the PCB has unique needs. Silicone thermal interface materials, encapsulants and coatings from Dow can help you meet them – and increase performance while opening up new design possibilities.

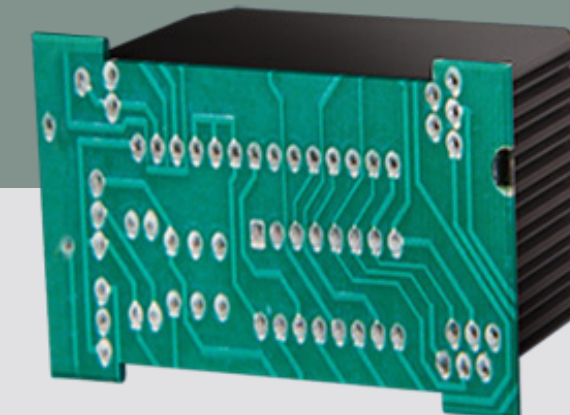
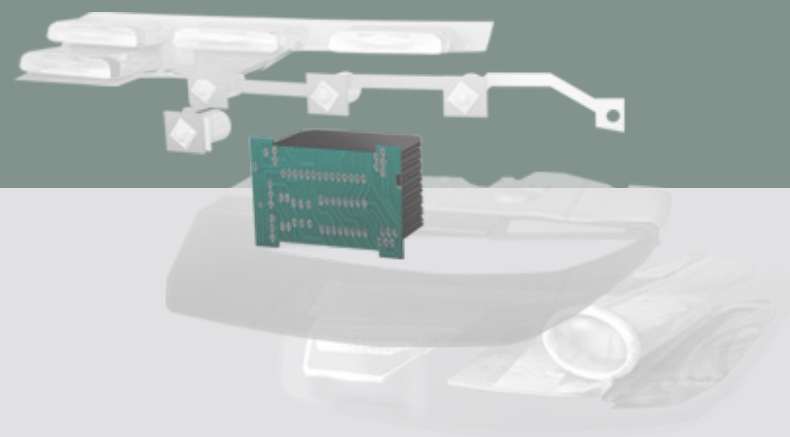
- ▶ Thermal interface materials
- ▶ Reflective material
- ▶ Clear encapsulants

Learn more

How can Dow silicones help you meet your LED challenges? Talk to a member of the [Dow team](#).

Solutions for

LED Headlamp assemblies



Control/heat sink

Heat management is one of the most vital considerations in your LED headlamp design. Silicone thermal management materials from Dow offer you highly stable and versatile options to manage heat.

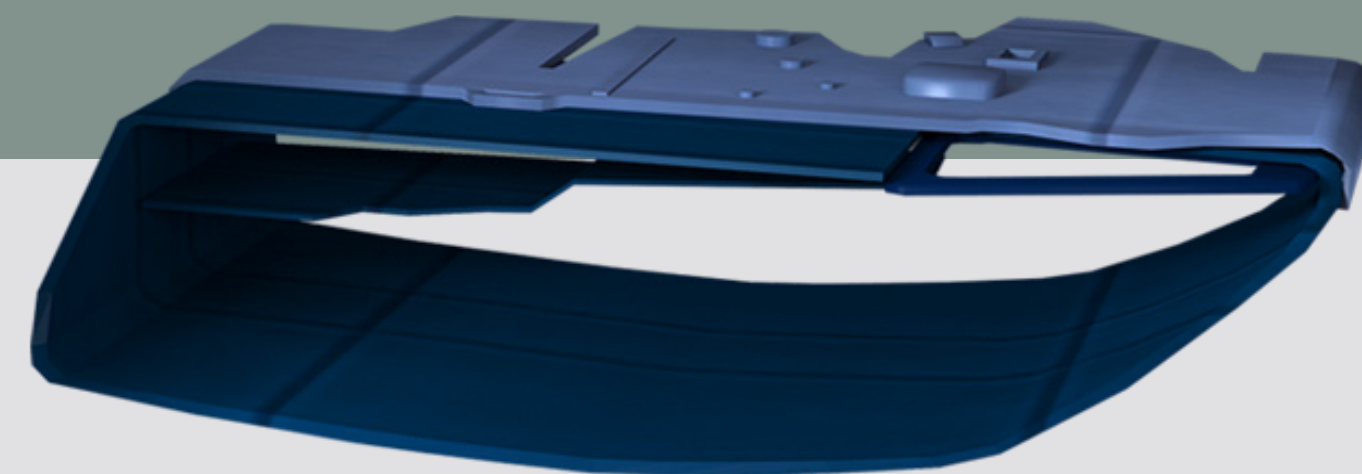
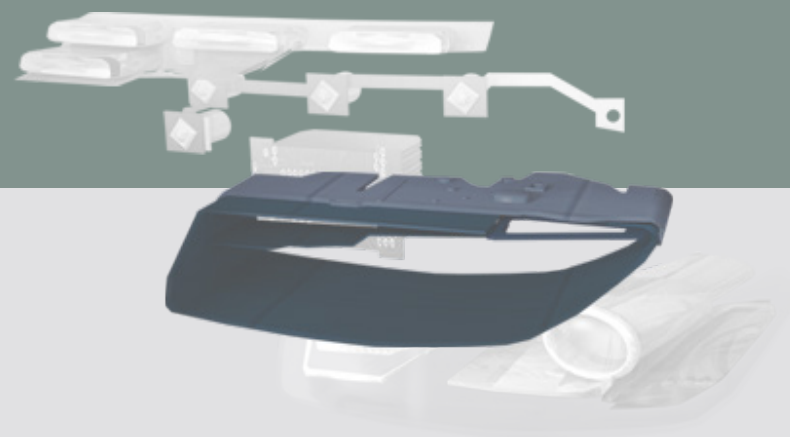
- ▶ Conformal coatings/gels
- ▶ Thermal interface materials
- ▶ Thermally conductive pottants

Learn more

How can Dow silicones help you meet your LED challenges? Talk to a member of the [Dow team](#).

Solutions for

LED Headlamp assemblies



Housing

Your assembly depends on the integrity of its housing. DOWSIL™ silicone adhesives and sealants help you maintain a moisture-, dust- and dirt-proof environment with long-lasting adhesion under the most demanding conditions.

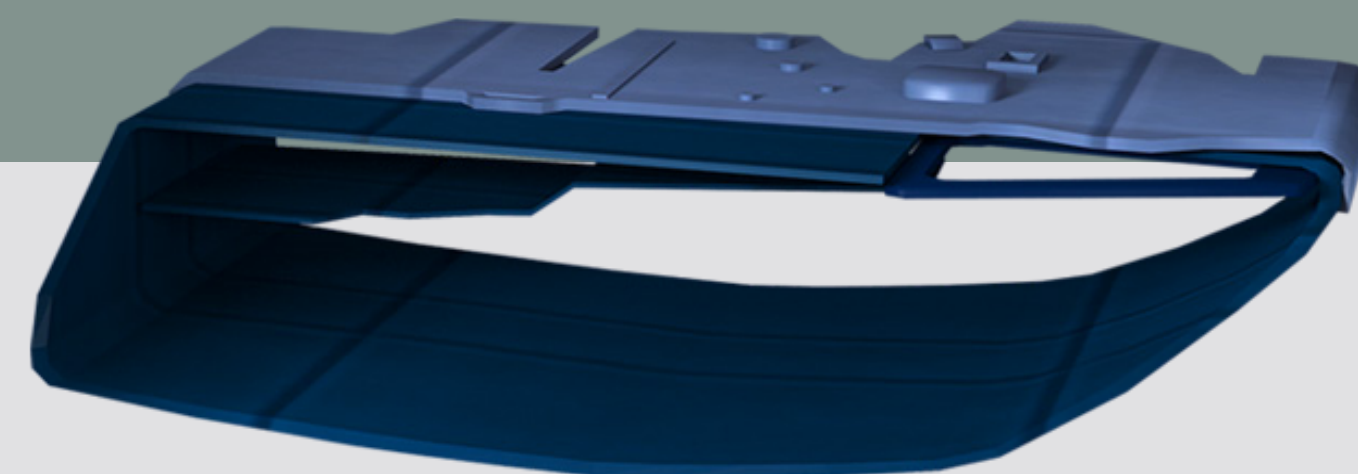
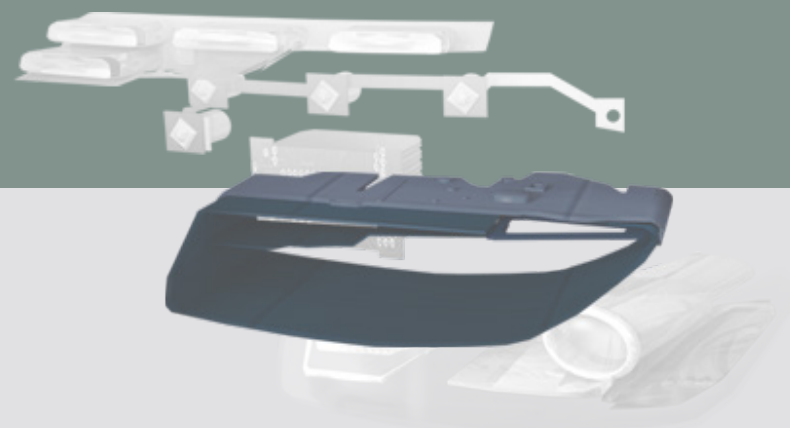
▶ [Adhesives and sealants](#)

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Solutions for

LED Headlamp assemblies



Housing

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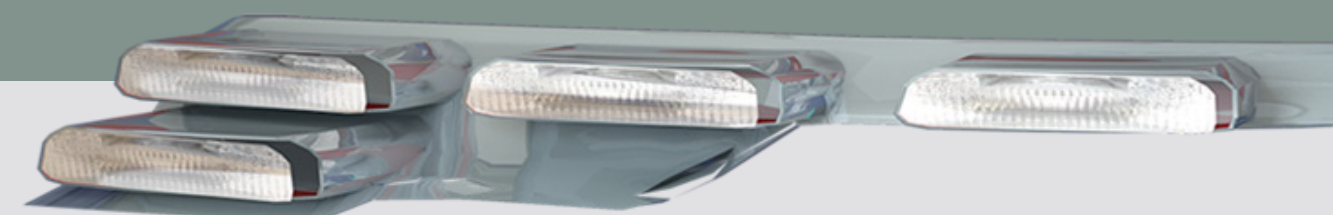
Solutions for

LED Headlamp assemblies

▶ Adhesives/sealants

▶ Moldable optical silicones

▶ Reflective material



Lens/assembly

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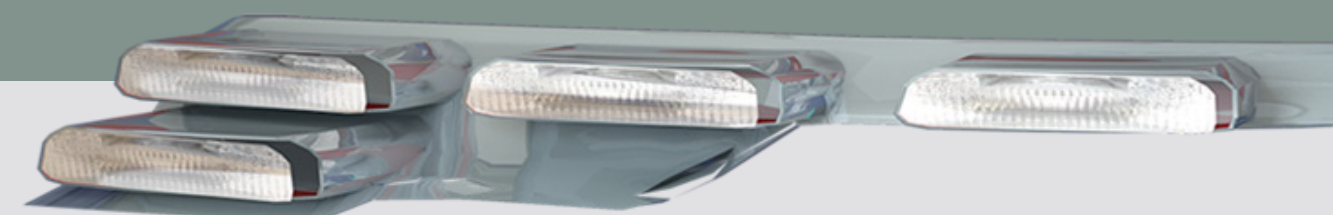
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- ▶ [SILASTIC™ MS-2002 Moldable Silicone White Reflector](#)

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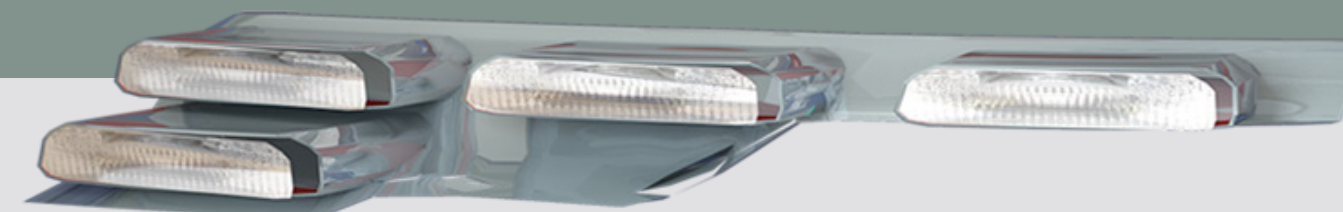
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Solutions for LED Headlamp assemblies

▶ Adhesives/sealants

▶ Moldable optical silicones

▶ Reflective material



Lens/assembly

Reflective material

This award-winning moldable silicone is a white reflective material which enables creativity and flexibility in designing and manufacturing light reflectors. This is a high viscosity, high Shore A hardness, fast curing optical molding resin for producing fine details with good resistance to environmental aging. DOWSIL™ MS-2002 Moldable Silicone allows for excellent mold detailing or feature reproduction, and the ability to mold undercuts, etc. allows for more flexibility in your designs.

▶ [SILASTIC™ MS-2002 Moldable Silicone White Reflector](#)

Learn more

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silicone elastomers by 



Solutions for

LED Headlamp assemblies

▶ Thermal interface materials

▶ Reflective material

▶ Clear encapsulants



LED board

Thermal interface materials

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- ▶ DOWSIL™ TC-5080 Thermally Conductive Grease
- ▶ DOWSIL™ TC-5629 Thermally Conductive Compound

Learn more

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DOWSIL™

silicones by 

Solutions for LED Headlamp assemblies

▶ Thermal interface materials

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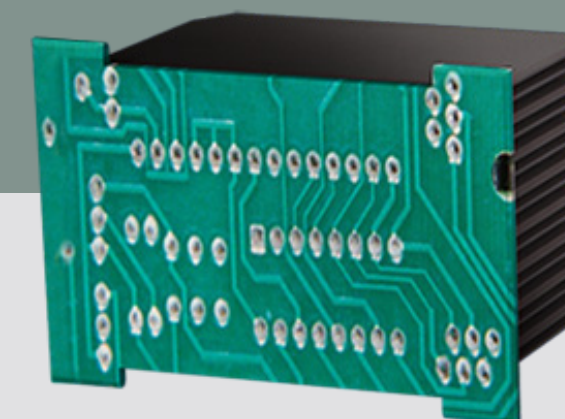
Solutions for

LED Headlamp assemblies

▶ Conformal coatings/gels

▶ Thermal interface materials

▶ Thermally conductive pottants



Control/heat sink

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- ▶ DOWSIL™ EG-4131 Dielectric Gel
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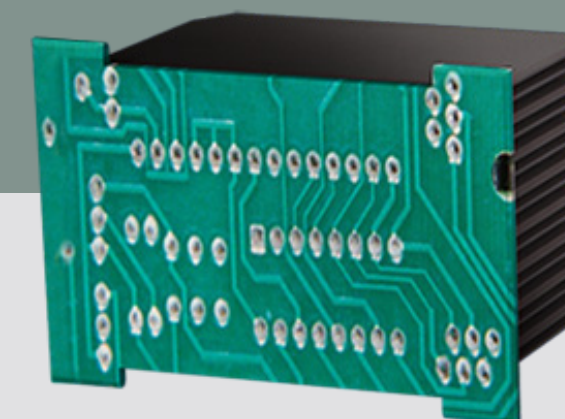
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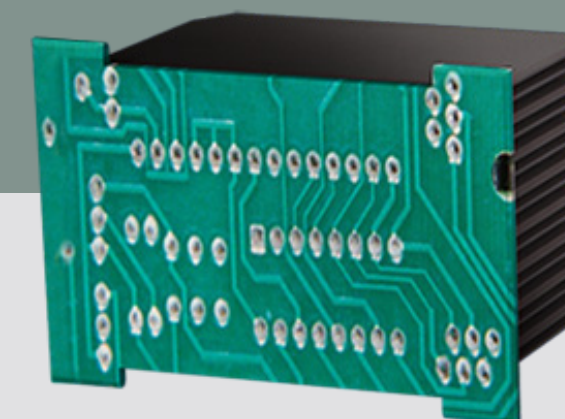
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Control/heat sink

Thermally conductive pottants

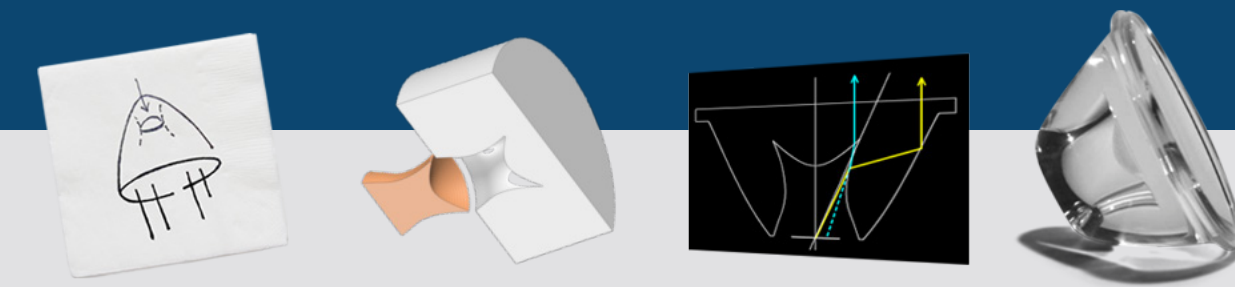
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Solutions for Optical coupling



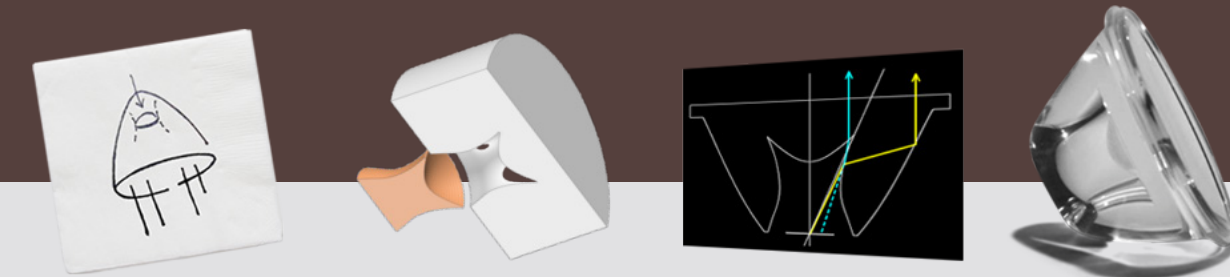
Optical coupling for displays

DOWSIL™ optical gels have been used extensively to seal and protect, by coating, encapsulating, or potting various optoelectronics due to their stress relieving capabilities and high refractive index, as well as the stability of these properties over time. Cured gels retain much of the stress and self-healing qualities of a liquid, while providing the dimensional stability of an elastomer – which is increasingly needed for delicate components.

Optical coupling gels

- ▶ DOWSIL™ EG-1200 Gel
- ▶ DOWSIL™ EG-4131 Dielectric Gel
- ▶ DOWSIL™ VE-6001 UV Optical Bonding

Solutions for Clear encapsulants



Secondary optical encapsulants

One way to realize greater cost efficiency, and lower your total cost of ownership is through materials that can perform multiple functions. DOWSIL™ secondary optical encapsulants offer you that opportunity. These materials provide superior protection from moisture, thermal stress, shock and impact, and offer excellent optical performance. You can count on minimal yellowing and degradation, while maintaining consistent light quality over the product lifespan.

Secondary optical encapsulants

- ▶ [DOWSIL™ EI-1184 Optical Encapsulant](#)
- ▶ [DOWSIL™ EI-2888 Primerless Silicone Encapsulant](#)

LED Ecosystem

LED innovation ecosystem

As an LED lighting customer, you will gain the support of the Dow LED Innovation Ecosystem.

This broad and growing global network extends from Europe to Asia to the Americas and spans the entire LED value chain. It includes dozens of optical and LED component designers and manufacturers and offers the expertise you need to develop a true total solutions package with such services as:

- Material development
- Optical design
- Prototyping
- Analytical testing
- Application development
- Process development

You will also gain the support of our extensive global network of equipment manufacturers, distributors and specialty repackagers. Together, this array of resources and relationships offers you one of the most comprehensive sources for advanced materials solutions.





Help



How can we help you?

Would you like to know more about how Dow silicone materials can help make your LED lighting ideas brighter?

Talk to one of the [Dow technical experts](#) or visit [dow.com/lighting](https://www.dow.com/lighting).

SiLASTIC[™]

DOWSIL[™]

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