

High-quality connections **for lighting fixtures**



**OTTO
CHEMIE**

Sealants • Adhesives

A shining example in terms of quality

Artificial lighting is an economic factor that is often underestimated. It turns night into day, makes it possible to work in safe and healthy conditions, or warns about dangers and as such protects us from having accidents. At the same time, artificial light requires valuable energy. Today, modern lighting helps to fulfil the requirements expected of artificial lighting.

Through its range of highly specialised sealants and adhesives OTTO provides a significant contribution to the production of efficient, modern lamps with high levels of strength and durability.

With OTTO, you will benefit from over 40 years of knowledge and experience in research, development, production, and industrial processing of specialist products. We will support you with any sealant or adhesive-related questions you may have, from prototypes to the mass production of lamps.



The information in the present document corresponds to the status quo on going to print, refer to the index (on the outside back cover).

Due to the many possible influences during and after application, the customer always has to carry out trials first.

Please observe the respective technical data sheet! This information is available on the Internet at www.otto-chemie.com.

Errors and typographical errors are excepted.

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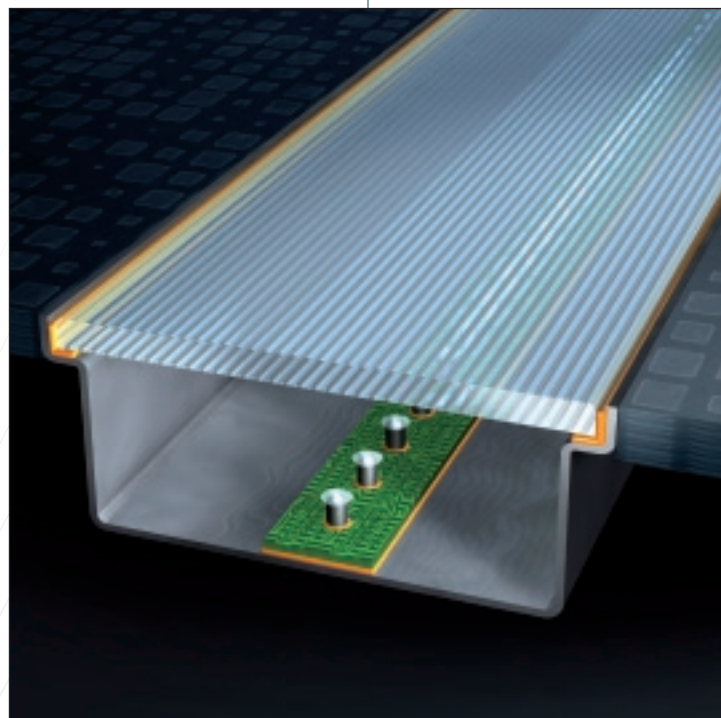
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WEBSITE:

www.otto-lighting.net

Bonding and Sealing of Lamp Casings

Generally, casings are made from plastic, metal, and glass. The adhesive used to join these materials must therefore perfectly adhere to them, compensate for the different physical properties without affecting the materials themselves.

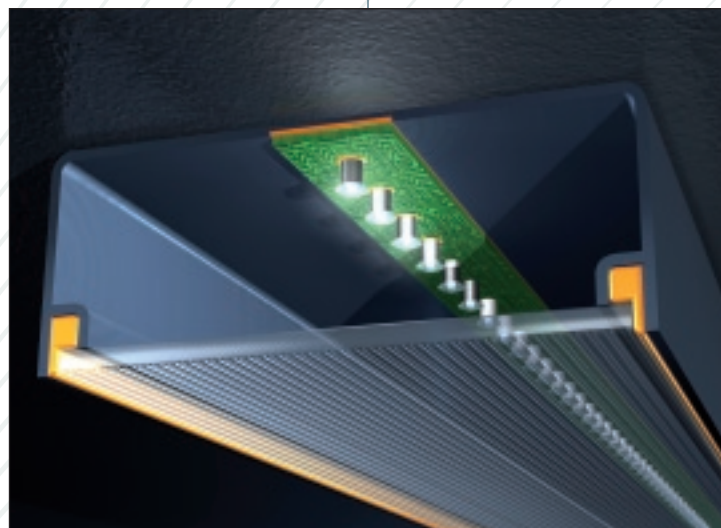


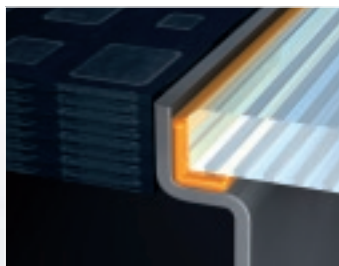
The OTTO solution.

OTTO sealants and adhesives are suitable for bonding and sealing different types of luminaire designs. In addition to perfect adhesion even under extreme conditions, the sealants and adhesives can also support the design of the lamps.

OTTO sealants and adhesives used for bonding lamp casings are characterised among other things by the following features:

- Very strong adhesion to casings and glass panels even under extreme weather conditions
- Stress-compensating bonding for a permanent connection, even with materials of varying expansion properties
- Excellent temperature resistance
- An almost unlimited variety of colours for innovative design requirements



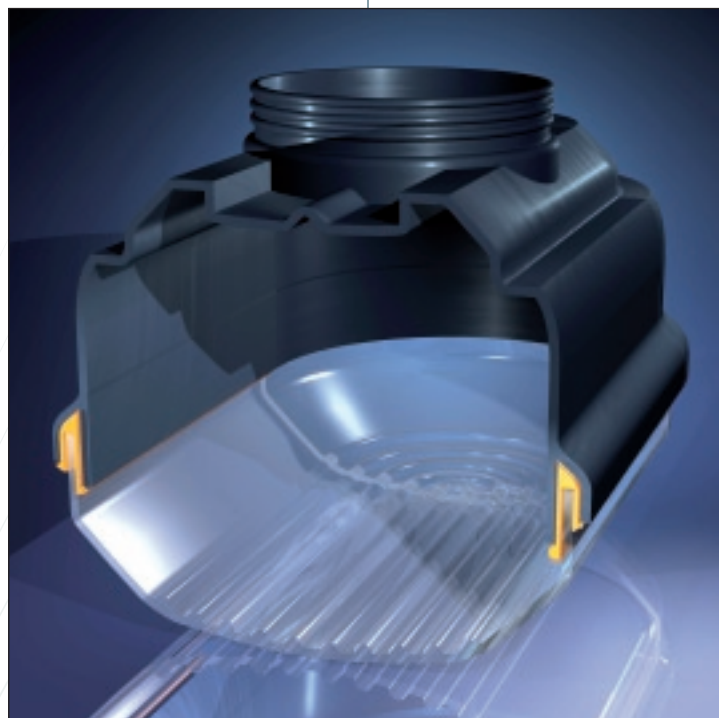


	Novasil® S 800	Novasil® S 802	Novasil® S 821
CROSS-LINKING SYSTEM	One-component alkoxy silicone	One-component alkoxy silicone	Two-component alkoxy silicone
MIXING RATIO	-	-	10:1
MAIN CHARACTERISTICS	<p>Excellent self-adhesion on plastics</p> <p>High adhesive power</p> <p>Non-corrosive</p> <p>Low odour</p>	<p>Independently tested by Evonik for Plexiglas® and by Bayer for Makrolon®</p> <p>Oxime-free</p> <p>Conforms to LEED</p> <p>Excellent self-adhesion on plastics</p>	<p>For fully automated productions</p> <p>Slightly self levelling</p> <p>High adhesive power even without primer</p> <p>Non-corrosive</p> <p>Adjustable colour</p>
APPLICATION	Allows both manual and automatic application	Allows both manual and automatic application	Automatic with dosing system

Bonding and Sealing of Vehicle Lights

Vehicle lights and their adhesives must be able to withstand various natural and artificial influences for decades, whether it be rain, extreme temperatures and temperature differences, exposure to UV, salt, acids and cleaning agents, or even vibrations or distortion.

In addition, the application of the highly specialised adhesive to the adhesion area should be simple and efficient, preferably feasible fully automated.

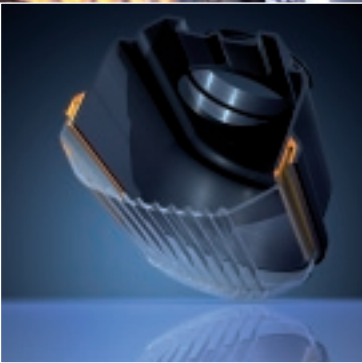


The OTTO solution.

OTTO adhesives enable reliable and durable bonding of any kind of vehicle light and are ideal for industrial processing.

Their advantages:

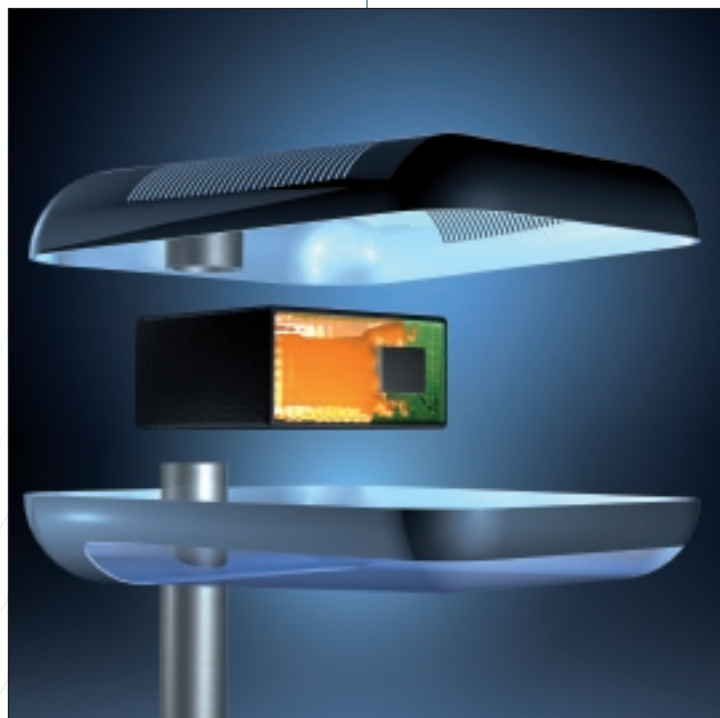
- Excellent adhesion to plastic
- Fast curing for industrial production
- Non fogging due to the use of high quality raw materials



	Novasil® S 801	Novasil® S 820
CROSS-LINKING SYSTEM	One-component alkoxy silicone	Two-component alkoxy silicone
MIXING RATIO	-	10:1
MAIN CHARACTERISTICS	Transparent colour for visible bonding Non-corrosive Compatible with polycarbonate (PC) and polymethylmethacrylate (PMMA) Excellent self-adhesion on plastics	Low fogging Fully automatic bonding of vehicle lights Fast curing Excellent plastic adhesion Non-corrosive
APPLICATION	Allows both manual and automatic application	Automatic with dosing system

Potting of Electronic Components

I ncreasing demands on the quality and resilience of lamps do require alternative manufacturing means. This is where the potting of electronic components with a two-component sealing compound arises. Sealing compounds are able to withstand high temperatures and large amounts of physical stress, yet are built using space-saving construction methods.

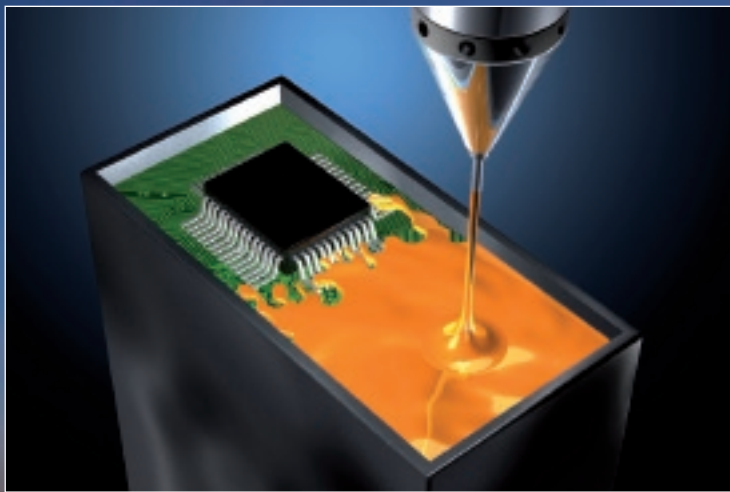


The OTTO solution.

OTTO sealing compounds protect highly sensitive electrical and electronic components from moisture, short circuits, and shock.

Among other things, they provide the following benefits:

- Excellent plastic adhesion
- Fast curing time even on thick coatings for a fast industrial production
- Low viscosity to fill spaces without air bubbles



	Novasil® S 822
CROSS-LINKING SYSTEM	Two-component alkoxy silicone
MIXING RATIO	10:1
MAIN CHARACTERISTICS	<p>Quick curing</p> <p>Very flowable</p> <p>Not electrically conductive</p> <p>Non-corrosive</p> <p>According to UL 94 HB, RTI 105 ° C</p>
APPLICATION	Automatic with dosing system

Benefit from **Professionals**

OTTTO's high quality and highly specialised sealants and adhesives make OTTO an important partner for many industrial sectors. For the lighting industry we already offer a wide range of products which should meet the grander part of your needs. But it is our client-oriented services that complements our offerings. With OTTO you cannot only expect a more consistently high quality product with a safe and speedy delivery, but we also provide maximum levels of flexibility, long-standing experience, and extensive know-how when it comes to the development of customised solutions. The sooner you contact us during the developing process the better we will be able to be of assistance and customise our products to fulfill your demands. From the initial product design right through to the manufacturing process, we will be happy to advise and assist.

Application Consulting

Which is the best sealant and adhesive for your job? Our application consultants will work with you to define a set of requirements and will help you to find exactly the right product from our range.



Prototype Consulting



Are you planning a new product? The sooner you talk to us, the better we can understand your ideas. And we can maybe even improve your product ideas constructively or in terms of cost. We are happy to provide you with sealant and adhesive samples for prototype testing.

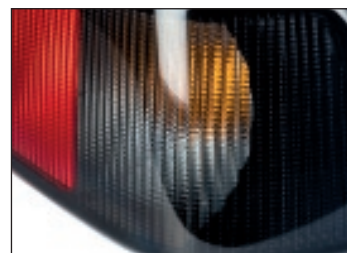
Custom Solutions

In the case that no product fulfills the requirements of your design we will try to develop a suitable solution. First of all, we will work with you to clarify the exact requirements such as physical and chemical stresses, the materials used, special features of the bond, aesthetic requirements, and production processes. Then we will develop an exact solution tailored to your product, even if it's on a small scale.



Production Consulting

The integration of sealants and adhesives into the production process is another aspect of our consulting service. Whether semi, or fully automatic, we will advise you on the choice of machinery, and optimise processing times so that a smooth production process can be guaranteed.



WEBSITE:

www.otto-lighting.net



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