

# VERSATILE SOFT SEALING ADHESIVE

## SEMICOSIL® 811

If you prefer short curing times and fast adhesion built-up with minimum energy input, SEMICOSIL® 811 is the product of choice. The highly specialized silicone adhesive sealant provides state of the art technology for efficient and ecofriendly processing.

### Product Description

SEMICOSIL® 811 is a non-slump low modulus silicone adhesive sealant designed for oven free processing and fast adhesion built-up at room temperature or minimum energy input.

It is used in 10:1 combination with catalysts ELASTOSIL® CAT PT-F or ELASTOSIL® CAT PT for regular cure or with ELASTOSIL® CAT UV for UV-activated cure.

### Features of SEMICOSIL® 811

- High flexibility, high-temperature resistance and low-stress adhesive
- Fast adhesion built-up at room temperature or with moderate energy input (< 10 min at 60 – 80 °C)
- Reduced cycle times (faster processing)
- In-line QC process possible
- No UV-transparent substrates needed
- Allows automated optical inspection control, blue fluorescence under black-light

### Applications

- Automotive electronics
- Sensor applications
- Various kinds of electronics control units
- Bonding display glass
- Covers to frame

### Product Properties of SEMICOSIL® 811

|                                     |                      |         |
|-------------------------------------|----------------------|---------|
| Viscosity D=0.5 s <sup>-1</sup>     | [mPa s]              | 400,000 |
| Viscosity D=25 s <sup>-1</sup>      | [mPa s]              | 45,000  |
| Viscosity mix D=0.5 s <sup>-1</sup> | [mPa s]              | 300,000 |
| Viscosity mix D=25 s <sup>-1</sup>  | [mPa s]              | 35,000  |
| Hardness shore A                    | [KME]                | 30      |
| Modulus [at 100%]                   | [MPa]                | 1.0     |
| Elongation                          | [%]                  | 300     |
| Tensile strength                    | [N/mm <sup>2</sup> ] | 3.0     |
| Lap shear strength PBT*             | [N/mm <sup>2</sup> ] | 1–2     |
| Lap shear strength Al**             | [N/mm <sup>2</sup> ] | 1–2     |

\*0.4 mm between ULTRADUR® BG 4300 GF 30

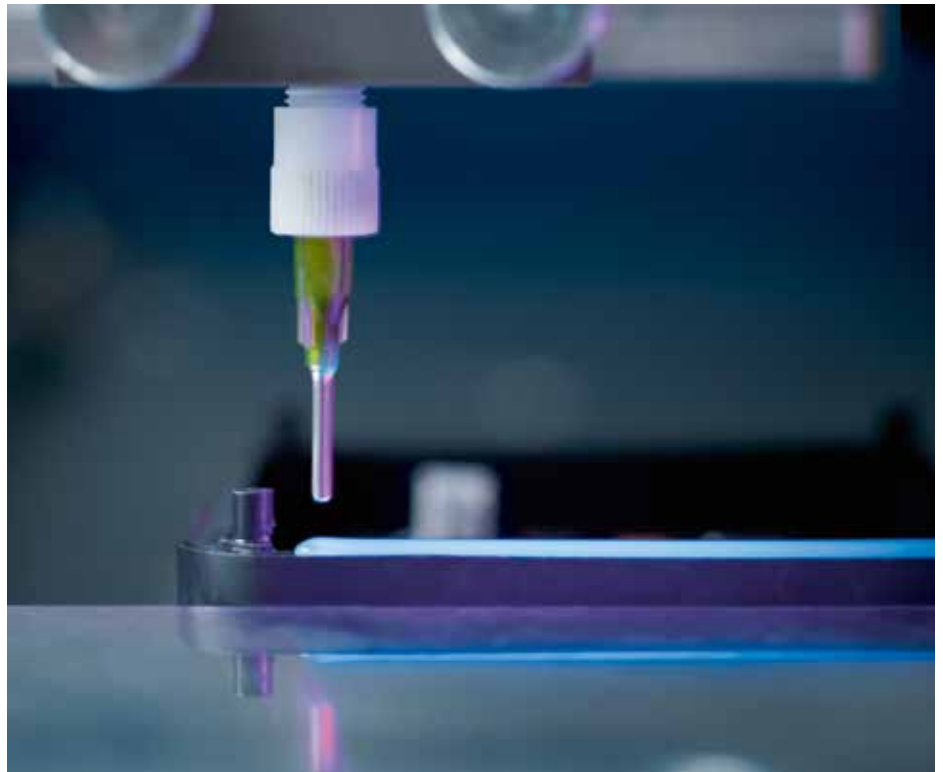
\*\*0.4 mm between AlMgCu 2pl (non treated) all measured after UV irradiation of SEMICOSIL® 811/ ELASTOSIL® CAT UV (10:1) using UV A 120 mW/cm<sup>2</sup> /10 sec, 24 h at 25 °C



**Your Plus: Robust Adhesion to Sensitive Substrates**

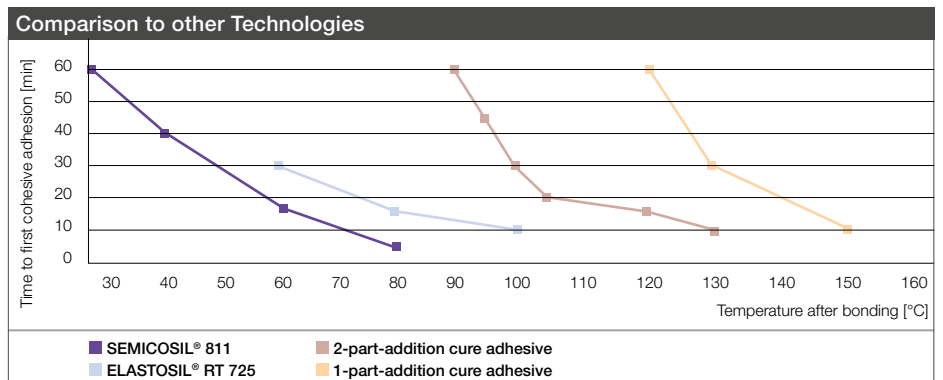
| Substrates  |                                      |
|---|--------------------------------------|
| Polybutylenterephthalat                             | PBT                                  |
| Polyamide   | PA                                   |
| Polyphenylene sulfide                               | PPS                                  |
| Glass-reinforced epoxy/<br>phenolic laminate sheets | FR4                                  |
| Metals  |                                      |
| Al  | Al,<br>Al MgCu<br>Al Mg <sup>3</sup> |
| Copper  |                                      |
| Steel   |                                      |
| Glass   |                                      |
| Coated display glass                                |                                      |

The built-up and adhesion on specific surfaces may differ. Own test to monitor application requirements are recommended



**Your Plus: Fast and Efficient Adhesion Built-up**

SEMICOSIL® 811 with PT-catalysts  
ELASTOSIL® CAT PT or with UV-activated  
ELASTOSIL® CAT UV offers faster adhesion built-up already at room temperatures (45 – 60 min) or at moderate temperatures (< 10 min at 80 °C).  
During transport or storage SEMICOSIL® 811 does not require any cooling.



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