

## BSP®- Silicon profiles extruded gaskets and injection moulding parts

Factsheet: BSP-Silicones 2209EN

BSP-Silicones provide highly effective solutions for a wide variety of sealing applications. Produced from synthetic elastomers, enabling to function in thermal, mechanical and chemical environments. BSP-silicone profiles are used in building industry in the field of structural and overhead glazing, aviation, food and paramedical industries. We have over 4.500 different molds. We will be pleased to assist you in developing the right tool for your specific application.



### Characteristics

- Excellent weathering- and UV resistance
- Extreme low temperature flexibility
- Wide range of Shore-A Hardnesses
- Compatibility with paints
- Safe bonding (on glass) with RTV-silicones
- Most exact profile shaping

### Permanent deformation

The permanent deformation after use of BSP-Silicones is much smaller than other types of rubber. DIN 7863-1 requires for rubber gaskets for use in window and façade construction a DV of  $\leq 35\%$ . BSP- Silicones surpasses EPDM and CR rubber behavior by far. In addition, this will be fulfilled in the range of  $-60^{\circ}\text{C}$  up to  $120^{\circ}\text{C}$ .



### Technical properties

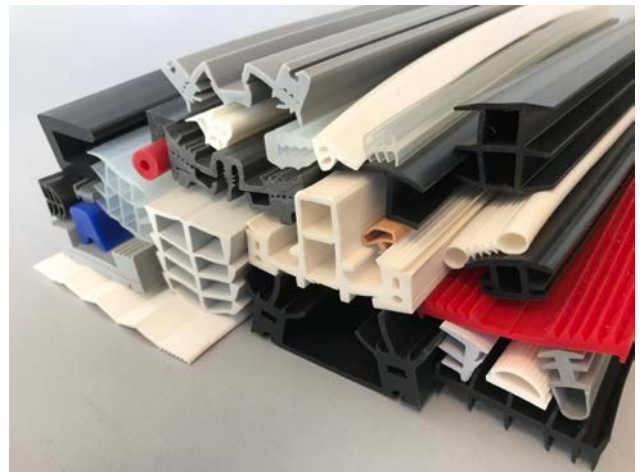
Spec. weight (Din 53550):	1.1-1.5 gr/cm <sup>3</sup>
Hardness (Din 53505):	30, 60, 80 Shore-A
Elongation at break (Din 53504):	200 - 700%
Tensile strength (Din 53504):	3.0 - 9.0 MPa
Tear strength (ASTM D624):	10 - 20 N/mm
Rebound resilience (Din 53512):	20 - 40%
Compression set (Din 53517):	$\leq 10\%$

### Thermal properties

BSP-profiles are from  $-60^{\circ}\text{C}$ . to  $200^{\circ}\text{C}$ . and with special recipes even up to  $250^{\circ}\text{C}$  dry heat, permanently elastic. The heat conductivity is at  $3,5 \cdot 10^{-4} \text{ cal/cm}^2 \cdot \text{sec} \cdot \text{gr} = 0,15 \text{ W/m}^2 \cdot \text{sec}$ . At moist heat or vapor BSP profiles can be used up to  $140^{\circ}\text{C}$ .

### Chemical resistance

HTV silicone is resistant to acids and alkalis. Also against polar solvents such as ketone, ester, aliphatic, aromatic and chlorinated hydrocarbons. By mineral oils swelling can occur which can be brought back.



### Bonding

BSP-silicone profiles can be vulcanized with a variety of silicone sealants on glass, aluminum, plastics, and stucco. Glue and silicone parts become one by vulcanization. Further advice and/or own tests are recommended.

### Compatibility with lacquers and paints

Varnishes and paints don't attach to silicone. At contact BSP profiles won't be inhibited in function nor will discoloration occur.

### Plasticizers

BSP-silicone rubber profiles don't contain any plasticizers. If they are in permanent contact with plastics such as polycarbonate and polyacrylate no deterioration will occur. By using BSP-silicones instead of other rubber types, tear stress corrosion on synthetic materials will be avoided as well.