

ATTACHED TO YOUR WORLD

# **Sealants For Transportation**

SILYL MODIFIED POLYMER
SEALING · BONDING · GLAZING





# A GLOBAL LEADER IN SMART ADHESIVES

For more than a century, we have developed innovative sealing and bonding solutions that touch and improve people's daily lives. Customers worldwide use our bonding systems in countless applications, across various market segments, from industrial manufacturing, assembly and transportation, to daily mobility and e-mobility applications.

## BOSTIK,

# AN ARKEMA COMPANY

We place sustainable development solutions at the heart of our innovation policy and product evolution. With the strong support of our parent company, Arkema, a leader in Specialty Materials, we bring you a unique position in the adhesives market: a capacity to innovate, tailored solutions, short time-to-market.

#### **GLOBAL FOOTPRINT**

Bostik is one of the world's largest adhesive and sealant companies.



€2.9bn

2022 annual sales



6,000+

employees



**55** 

countries





4

R&D centres



### **BOSTIK SMP SOLUTIONS FOR TRANSPORTATION**

SMP is the acronym for **Silyl Modified Polymer**, also known as **hybrid sealants**. They are developed to meet specifications of bonding strength, durability, and elasticity over a wide range of temperature and humidity conditions. SMP based sealants are mostly used for sealing, bonding and glazing applications in transportation and automotive.

#### **BOOST YOUR PERFORMANCE WITH MORE SUSTAINABLE SOLUTIONS**



# PRIMERLESS APPLICATION

Boost productivity and quality while reducing cost-in-use!

- > No or limited surface preparation
- > Strong and durable fixing
- > Easy cleaning



# MORE SUSTAINABLE SOLUTIONS

Safer for your employees, customers, and the environment!

- > Solvent free option
- > Isocyanate free technology
- > Less consumables



# TECHNICAL ADVANTAGES

Strong ageing and weathering performance, high durability.

- > High UV resistance
- > No bubbling
- > Very good paintability



# DISCOVER OUR SMP RANGES AND APPLICATIONS



## **SEALING & BONDING**

- » Permanently elastic sealant
- » Wide range of skinning time available
- » Suitable for multiple substrates



#### **BONDING**

- » Excellent green strength
- » Good adhesion to non porous materials
- » Suitable in industrial applications requiring high overall performance



### **GLAZING**

- » Very good green strength
- » Short drive-away time according to the FMVSS 212 crash test
- » Suitable for aftermarket applications

# Premium solutions: ISR Range

Discover our ISR range that is a landmark in performance and versatility. With more than forty years experiences in the industry, Bostik ISR range offers premium robust and versertabe solutions. Moreover, certain products have obtained specific certification according to market requirment.

Beyond exceptional product features, ISR range products are globally available, which means we are able to supply customers from each region.

| SEALING & BONDING |                                    |                          |                                           |                     |                                                                      |  |
|-------------------|------------------------------------|--------------------------|-------------------------------------------|---------------------|----------------------------------------------------------------------|--|
| Product           | Skin forming time<br>23°C/50% R.H. | Shear stress<br>ISO 4587 | Elongation at break<br>ISO 37 (dumbbells) | Shore A<br>Hardness | Description                                                          |  |
| ISR 70-02 AP      | ca. 60 min                         | ca. 1.0 MPa              | ca. 250%                                  | ca. 45              | Multi-purpose<br>adhesive & sealant<br>External ageing<br>resistance |  |
| ISR 70-03*        | ca. 10 min                         | ca. 2.5 MPa              | ca. 200%                                  | ca. 58              | Elastic bonding adhesive                                             |  |
| ISR 70-03 FR      | ca. 10 min                         | ca. 2.0 MPa              | ca. 200%                                  | ca. 50              | Fire retardant<br>certification:<br>EN 45545 HL3,<br>R22&R23         |  |
| ISR 70-07         | ca. 60 min                         | ca. 1.1 MPa              | ca. 200%                                  | ca. 40              | Easy sprayable sealant                                               |  |

<sup>\* -</sup> Fire retardancy according to EN45545-2 - HL3, R1&R7

<sup>-</sup> Longer skin forming time available: ISR 70-03 sskf

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| Product       | Skin forming time<br>23°C/50% R.H. | Shear stress<br>ISO 4587 | Elongation at break<br>ISO 37 (dumbbells) | Shore A<br>Hardness | Description              |
|---------------|------------------------------------|--------------------------|-------------------------------------------|---------------------|--------------------------|
| ISR 70-03*    | ca. 10 min                         | ca. 2.5 MPa              | ca. 200%                                  | ca. 58              | Elastic bonding adhesive |
| ISR 70-05 AP* | ca. 10 min                         | ca. 2.3 MPa              | ca. 200%                                  | ca. 60              | 2h SDAT<br>for 2 airbags |

<sup>\* -</sup> Fire retardancy according to EN45545-2 - HL3, R1&R7

# GLAZING

| Product       | Skin forming time<br>23°C/50% R.H. |             | Elongation at break<br>ISO 37 (dumbbells) |        | Description               |
|---------------|------------------------------------|-------------|-------------------------------------------|--------|---------------------------|
| ISR 70-08 AP* | ca. 10 min                         | ca. 2.3 MPa | ca. 200%                                  | ca. 60 | 1h SDAT<br>for 2 airbags  |
| ISR 70-12 AP  | ca. 10 min                         | ca. 2.3 MPa | ca. 200%                                  | ca. 60 | 15mins SDAT for 2 airbags |

<sup>\*</sup> Fire retardant certification: EN45545-2 - HL3, R1&R7

<sup>-</sup> Longer skin forming time available: ISR 70-03 sskf; ISR 70 05 AP SSKF

# **STR** series

The STR series offers new rebalanced properties and cost-effectiveness. As ISR range, they are also formulated without isocyanate and provide strong adhesion properties without primer on a wide variety of substrates.

They can therefore be used in many different industrial applications for sealing and bonding.

|           | SEALING                            |     |                                           |        |                                                 |  |  |  |
|-----------|------------------------------------|-----|-------------------------------------------|--------|-------------------------------------------------|--|--|--|
| Product   | Skin forming time<br>23°C/50% R.H. |     | Elongation at break<br>ISO 37 (dumbbells) |        | Description                                     |  |  |  |
| STR 60-01 | ca. 120 min                        | N/A | ca. 500%                                  | ca. 25 | Long open time<br>& high elongation<br>at break |  |  |  |

|           | SEALING & BONDING                  |                          |                                           |        |                                         |  |  |
|-----------|------------------------------------|--------------------------|-------------------------------------------|--------|-----------------------------------------|--|--|
| Product   | Skin forming time<br>23°C/50% R.H. | Shear stress<br>ISO 4587 | Elongation at break<br>ISO 37 (dumbbells) |        | Description                             |  |  |
| STR 60-02 | ca. 30 min                         | ca. 1.0 MPa              | ca. 300%                                  | ca. 45 | Excellent<br>multipurpose<br>properties |  |  |
| STR 60-07 | ca. 20 min                         | -                        | ca. 150%                                  | ca. 55 | Sprayable sealant                       |  |  |

| BONDING   |                                        |             |                                           |        |                             |  |  |
|-----------|----------------------------------------|-------------|-------------------------------------------|--------|-----------------------------|--|--|
| Product   | <b>Skin forming time</b> 23°C/50% R.H. |             | Elongation at break<br>ISO 37 (dumbbells) |        | Description                 |  |  |
| STR 60-03 | ca. 15 min                             | ca. 1.7 MPa | ca. 130%                                  | ca. 60 | High versatility            |  |  |
| STR 60-05 | ca. 25 min                             | ca. 1.8 MPa | ca. 200%                                  | ca. 65 | High initial green strength |  |  |

For specific substrates, please contact our experts to learn more about surface preparation



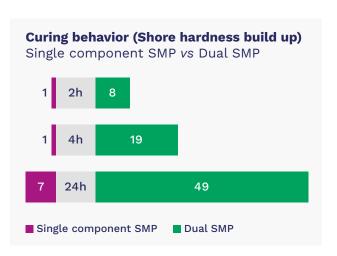
# **DUAL SMP SYSTEM**

The Dual SMP system produces a mixture with extreme green strength, faster cure times, and rapid total strength build up, which is independent from external influences (like humidity or temperature).

This system operates using a gear-based transmission gun design that combines SMP (A-component) with an accelerator (B-component).











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