BUS & COACH
Driving Technology into the Next Generation
SIKA’S SOLUTIONS FOR BUS & COACH

1C POLYURETHANE
It consists of pre-polymer based flexible adhesives and sealants that cure on exposure to atmospheric moisture to form a durable elastomer. In production it reduces number of processing stages, shortens production cycles and cuts costs in terms of materials, energy and capital investment, accommodate manufacturing tolerances, simplify preparation and leave surfaces undamaged. It bonds material with different coefficient of thermal expansion.

• 1C PU fast skinning sealant for interior application: Sikaflex®- 211 EMEA
• 1C PU sealant for interior application: Sikaflex®- 221
• Weather resistant sealant for exterior application: Sikaflex®- 211 WR LOT
• Assembly adhesive: Sikaflex®- 252
• High performance, multipurpose fast curing adhesive: Sikaflex®- 260 IA
• Direct glazing adhesive with weathering resistance: Sikaflex®- 265
• Direct glazing adhesive with weathering resistance: Sikaflex®- 263
• Direct glazing adhesive with weathering resistance: Sikaflex®- 268
• Weathering resistant adhesive for organic glass bonding: Sikaflex®- 223

Few application areas are general sealing applications (interior and exterior), direct glazing, side panel bonding, roof bonding and sealing, floor bonding, front and rear mask bonding, body assembly.

Please refer Sika’s General Pre-treatment chart before selecting suitable products or contact Sika Technical services for further details.

1C SILANE TERMINATED POLYURETHANE TECHNOLOGY
Sika’s 1C STP are isocyanate free and moisture curing adhesives and sealant based on the silane-terminated polyurethane technology giving good adhesion on a wide range of substrates with minimum surface preparation. STP cure to form a durable elastomer by absorbing moisture from the air. Specific product advantages include very high resistance to UV degradation and weathering. Excellent adhesion to a wide range of substrates with minimum surface preparation.

Few 1C STP Products are given below:
• Isocyanate free windshield adhesive: Sikaflex®- 558
• 1C STP assembly adhesive: Sikaflex®- 552 AT
• 1C STP fast skinning sealant: Sikaflex®- 51S IA

EPoxy HYBRID TECHNOLOGY
Sika has developed the chemistry of epoxy resins to produce epoxy and epoxy polyurethane hybrid polymers, SikaPower®.
Sika’s epoxy based technology is designed for use in industrial processes where stoving facilities are available. Applied in body or paint shop areas for various structural, semi structural and sealing applications.

Product details are given below:
• Structural metal adhesive: SikaPower®- 4588
• 2 C high strength panel adhesive: SikaPower®- 4720

HOTMELT ADHESIVE TECHNOLOGY
The hotmelt adhesives technology developed by Sika are non-reactive, SikaMelt®, physically curing products based on various thermoplastic polymers. Hotmelts are typically used to bond plastics, textiles or fibrous materials. These include carpets, air ducts, fresh air filters, polypropylene components (no surface preparation needed).

Few non reactive hotmelt based products are given below:
Non reactive polyolefin hotmelt for bonding unpolar substrates: SikaMelt®-91xx
Pressure sensitive hotmelt with medium to high tack and good temperature resistance: SikaMelt®-92xx
REACTIVE HOTMELT ADHESIVE TECHNOLOGY

Sika’s reactive hotmelts (RHM) are solid at room temperature and are based on polyurethane pre-polymers. SikaMelt®, combines the properties of hotmelts with those of reactive polyurethanes.

Sufficient early strength is attained when the material passes from the liquid to the solid state as it cools. By reaction with atmospheric moisture the adhesive is then transformed from a fusible thermoplastic to an infusible elastomer making it more resistant to high temperatures than non-reactive hotmelts.

Sika’s reactive hotmelt adhesives are heated to temperature of 120-160°C for application. Within this temperature range they exhibit a liquid or free flowing consistency. They are applied by spray or roller or in extruded bead form at coverage rates determined by the specific application.

Reactive hotmelts adhere well to textiles, plastics, GRP, wood, plastics or fibrous materials exposed to high temperature, pre-treated metals, polystyrenes, high polar substrates like polypropylene & polyethylene.

Few reactive hotmelt based products are given below:

- Polyolefin reactive hotmelts, specifically designed: SikaMelt®-918xx
- Polyurethane reactive hotmelts are suitable for all processes ranging from small component assembly to large area panel lamination: SikaMelt®-96xx

LAMINATING ADHESIVE TECHNOLOGY

Sika uses the term ‘Laminating adhesive technology’ to refer to a range of water-based and solvent-based panel adhesives developed for a variety of laminating applications.

Sika's laminating adhesives are formulated on a variety of chemical bases (acylates, various rubbers, polyurethanes). Laminating adhesives are based on either on polymer solutions suspended in solvents or on polymer emulsions (water based systems). These adhesives are of liquid consistency and applied by spray, roller, spatula or spreader at a coverage of 50-200 g/m. Through evaporation of the water (emulsions) or solvents they form a thermoplastic film that is activated by the application of heat (up to approx. 130°C). The substrates are brought together under vacuum or by means of a press. Laminating adhesives are used to form bonds that may be subject to high restoring forces. Products suitable for manual laminating applications are also available. Some water-based adhesive remain permanently tacky, and these are known as PSA (Pressure Sensitive Adhesives). The bond is formed under pressure and without application of heat, and these products are used to join substrates that are not subject to significant restoring forces. These adhesives cure at room temperature. PSA’s are suitable for floor coverings in bus assembly which imparts self-adhesive properties to textiles.

There are also other technologies available like 2 C PU, ENGINEERING SILICONE, POWERCURE TECHNOLOGY.
GLOBAL BUT LOCAL PARTNERSHIP

WHO WE ARE
Sika India Pvt. Ltd. is a wholly owned subsidiary of Sika AG.
Sika India caters to Bus, Truck, Railways and Marine applications under its Transportation market field.
Its market field engineering also ensures on-site application support and on-the-job training.
Through innovation in partnership with its customers Sika India provides various solutions.
Some of these are:
• Solutions for weight reduction, improved fuel consumption and reduced CO₂ emission
• Total system solutions and sustainable products that save time, cost and outperform health and safety standards
Sika India product brands for bus applications are:
• Sikaflex®
• SikaTack®
• SikaForce®
• SikaLastomer®
• SikaFast®
• SikaPower®
• SikaMelt®
• SikaSense®
• SikaTherm®
• SikaBaffle®
• SikaDamp®
• SikaGard®
• Sika Boom®

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