

## TECHNICAL DATA SHEET

# DEKASYL MS-5 HIGH TACK ADHESIVE & SEALANT

### PRODUCT

**Dekasyll MS-5** is a MS Polymer based adhesive with a high green strength and is suitable for making elastic constructive joints. Due to its high green strength clamping times can often be reduced or clamps are not needed anymore. **Dekasyll MS-5** can also be used as sealant, if similar material (similar stiffnesses) are joined together, or if mechanical fastening methods are used.

### APPLICATIONS

- Elastic bondings and sealings in e.g. bus-, train-, caravan-, camper and truck construction.
- Bonding of windows in e.g. busses and trains.
- Bonding of corner profiles of aluminium or polyester on trailers.
- Bonding of polyester parts on metal frames.

### FEATURES

- Solvent-, isocyanate- and PVC free.
- Very good UV-resistance and ageing properties.
- In general good adhesion on several substrates without the use of a primer.
- Permanent elastic within temperatures from  $-40^{\circ}\text{C}$  till  $+120^{\circ}\text{C}$ .
- Neutral, odourless and fast curing.
- Paintable after skin forming (wet on wet); this will in general not influence the curing speed.
- Paint compatible with most industrial paint- or lacquer systems, both alkyd resin and dispersion based (due to the large scale of different types of industrial paints a paint compatibility test is recommended!)

### ADHESION

In general **Dekasyll MS-5** adheres well without primer on clean, dry, dust- and grease free substrates of aluminium, stainless steel, galvanised steel, zinc, copper, brass, powder coated metal, most lacquered metal surfaces, glass, PVC, polyester (GRP), painted and lacquered wood, etc. No adhesion on untreated polyethylene, polypropylene and teflon. In those cases where due to great thermal or physical loads, especially under wet conditions, high adhesion demands are needed, the use of an adhesion promotor is recommended. For not mentioned substrates and additional information consult Dekalin.

### METHOD OF USE

**Dekasyll MS-5** can easily be extruded with a hand- or air pressure gun at temperatures between  $+5^{\circ}\text{C}$  and  $35^{\circ}\text{C}$ . In sealing applications **Dekasyll MS-5** should be tooled or smoothed within 12 minutes (at  $20^{\circ}\text{C}/50\%\text{R.H.}$ ) with a spatula or putty knife, occasionally moistened with a mild soap solution. Avoid soap solution penetrating between joint sides and sealant, because this will create loss of adhesion. In bonding applications the substrates have to be assembled within 15 minutes (at  $20^{\circ}\text{C}/50\%\text{R.H.}$ ) after applying **Dekasyll MS-5**. The higher the temperature, the shorter the open time will be! In general an adhesive thickness of 2 mm is recommended if similar materials (similar stiffnesses) are bonded. The larger the difference in thermal expansion is, the thicker the adhesive bead should be. For more details Dekalin should be consulted. At a temperature of  $20^{\circ}\text{C}$  and a relative humidity of 50% **Dekasyll MS-5** can be painted with the most industrial paints already 10 minutes after application. Best adhesion of paint coats is generally obtained if painted within 4 hours after applying **Dekasyll MS-5**. Cleaning tools or removing uncured residue of Dekasyll MS-2 can be done with a clean colourless cloth, wetted with e.g. acetone or MEK. It is recommended to make a trial first to check possible attack of the substrate by these cleaners.

**TECHNICAL DATA SHEET****TECHNICAL DATA**

Basic material	: MS Polymer
Curing method	: moisture
Specific density (20°C)	: ca. 1.4 kg/liter
Skin forming time (20°C/50% R.H.)	: ca. 12 min.
Open time (20°C/50%R.H.)	: < 15 min.
Curing speed after 24 hrs (20°C/50%R.H.)	: ca. 4 mm
Shore A hardness (DIN 53505)	: ca. 55
Volume change (DIN 52451)	: < 3%
Green strength (Physica Rheometer MC100) (max. load which can be applied per m <sup>2</sup> uncured adhesive without sagging)	: ca. 700 Pa
Tensile stress (100%) (DIN 53504/ISO 37)	: ca. 1.7 MPa
Tensile stress at break (DIN 53504/ISO 37)	: ca. 2.8 MPa
Elongation at break (DIN 53504/ISO 37)	: ca. 210%
Shear stress (DIN 53283/ASTM D1002) (Alu-Alu; adh. thickness 2mm; test speed 50 mm/min.)	: ca. 2.5 MPa
Tear propagation (DIN 53515/ISO 34) (Type C, test speed 500 mm/min.)	: ca. 14 N/mm
Solvent percentage	: 0%
Isocyanate percentage	: 0%
Temperature resistance	: - 40°C till +120°C
Temperature resistance (max. 20 minutes)	: +180°C
Application temperature	: +5°C till +35°C
UV- and weather resistance	: excellent
Colours (standard)	: white, black
Packaging	: 290 ml cartridges, 600 ml bags, other packaging on request.

**STORAGE STABILITY**

**Dekasyl MS-5** may be stored for 12 months in a closed (unopened) packaging in a dry place at temperatures between +5°C and +30°C (cartridges 18 months).

**SAFETY PRECAUTIONS**

No specific safety precautions required. Consult safety data sheet.

**TRANSPORT CLASSIFICATION**

Not applicable.

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