SikaTherm®-4150

Water-based high-performance flock adhesive

Technical Product Data:

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| Chemical Base | Synthetic resin Dispersion | |
| Colour | White | |
| Solid content (CQP002-0) | 38% approx. | |
| Density (CQP006-3) | 1,03 kg / I approx. | |
| pH value (CQP004-0) | 8 ± 1 | |
| Viscosity, 20 ℃ (Brookfield RVT, Sp. 4 / 5 Rpm) | 17000 mPas approx. | |
| Bonding process | Electrostatic flock operation | |
| Coating weight | 200 – 400 g / m² approx. wet, (depends on substrate) | |
| Way of application | Spraying | |
| Drying time | No drying time: flock processing occurs immediately after adhesive application. | |
| | Just after the flock process is completed the physical drying of the embedded textile flocks takes: | |
| | - At room temperature ¹⁾ : min. 90 mins. | |
| | - In drying tunnel or oven (at 40-50 °C): min. 40 mins | |
| | - In drying tunnel or oven (at 60-70 °C). min. 20 mins. | |
| Open time (20 °C) (CQP567-1) | Maximal 7 min after surface coating | |
| Processing temperature | 18℃-25℃ | |
| Shelf life | 6 months in unopened original container at the storage temperature of 5 - 25 °C, SikaTherm [®] is sensitive to frost, store above +5 °C. In Winter only transport in thermocontainer. | |

^{1) 23°}C and 50% relative humidity

Description:

SikaTherm[®]-4150 is a ready to use water borne one component adhesive for flock operation with long open time and very good adhesion to plastic materials.

SikaTherm[®]-4150 shows good nonsag properties and can be applied to vertical surfaces in thick layers (200 -400µm).

SikaTherm[®]-4150 is manufactured in accordance with the ISO 9001/14001 quality assurance system.

Product benefits:

- very good sprayability
- excellent non-sag properties Solvent free
- Broad adhesion range on plastic and wood surfaces
- very good adhesion to polyamide or polyester flock
- very good abrasion resistance in dry and wet state
- very high resistance against hydrolysis

Cure mechanism:

The curing occurs physically because of evaporation of water. Normally at temperatures below 95 °C in the drying tunnel or oven.



Areas of application:

Fields of application are the flocking of decorative surfaces in the industry automotive for production of trim parts e.g. gloves hoxes

Suitable surfaces are:

Plastics e.g. ABS, ABS/PC, ASA, Polyester, TPO*, PE* or PP* as well

* after physical pre-treatment

Method of Application:

Surface preparation:

The adhesion surfaces must be clean, dry and free of oils and fats. Release agents from the surface of the plastic parts must be removed with the help of suitable cleaners. To obtain wetting and good adhesion, the surface tension of plastic parts must be at least 38 mN/m.

Application:

The adhesive can be applied with a spraying gun (HVLP-System, nozzle 1,5-1,8 mm at 0,8-2,0 bar adhesive pressure) to the substrate.

The film thickness of the adhesive is in general 200-400 µm.

The flocking process has to be completed within the open time of the adhesive, which starts immediately after adhesive application!

The drying of the adhesive takes place normally in a drying tunnel or oven with temperatures below 95 °C.

After the drying process the flocked surfaces have to be cleaned from flocking material by air blast or careful brushing.

Cleaning of tools. Tap water is sufficient to clean the tools from uncured adhesive residues.

Cured adhesive can only be removed by mechanical means or suitable solvent.

Further information:

Copies of the following publications are available on request:

- Safety Data Sheet

Packaging information:

| Pail | 25 kg |
|-------|--------|
| Drums | 150 kg |

Important:

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheet ecological, containing physical, toxicological and other safety-related

Note:

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

For specific advice concerning preparation of the substrates or the choice of appropriate application devices, please contact our Technical Service.



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