Fermitopp HN 300

Technical data sheet

High-temperature resistant, neutrally crosslinked, elastic 1-component silicone sealant

Advantages and properties

Reliable and safe
Colourfast
Hot air resistant
UV resistant
Odourless

Characteristics

Fermitopp HN 300 is a silicone rubber ready for use characterised by its high heat resistance. It is compatible with laminated safety glass and it is UV-resistant. The sealant is highly weather and ageing resistant and non-corrosive. Building material class B1 is imperative for achieving different classes in building components as e.g. F30 or F60. Building material class B1 is achieved only when the product has cured completely. After curing HN 300 is totally odourless, physiologically harmless and inert.

Tests, Compliance with standards

DIN EN 15651-1 F25LM Ext.-Int.
DIN EN 15651-2 G25LM
DIN EN 15651-4 PW20LM Ext.-Int.
Approved by the Swiss association of cantonal fire insurance companies VKF
Building material class B1 according to DIN 4102-1
Meets the French VOC-requirements for class A+

Meets the requirements of IVD instruction sheet

No.11: Explanation of “Fire Protection”-technical terms from the perspective of sealants and joints filled with sprayable sealants.

Application

Suitable for fire retardant and fire resistant sealing of single panes and insulating panes in wood, aluminum, steel windows and for sealing expansion joints and butt joints in metal construction. Compatibility with the edge sealing material of the insulating glass must be ensured. Before using the product with laminated safety glass units consult our application engineering department.

Processing

Before application make sure that all building materials getting in contact with the sealant are compatible with the sealant.

Preparation of adherent surfaces: The adherent surfaces must be solid, dry and free from dust, grease and oil. Prime adherent surfaces carefully if required. Not suitable for tarry and bituminous substrates.

Joint design: In case of joints accommodating movement the joint dimensions must be chosen according to the maximum allowed distortion. A minimum joint cross section of 3 x 5 mm is imperative. Use a closed-cell PE backer rod or a suitable fire protection section for backfilling depending on the requirements of the given case. Compatibility of the backfilling materials must be determined by the user.

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Introducing the sealant: fermitopp HN 300 must be introduced into the joint evenly and without bubbles while the product is within the processing temperature range. When priming the substrate take into account the open time of the primer. Ensure good adhesion to the joint edges by applying pressure during finishing work. When using a smoother remove any strips of water immediately after sealing. If cleaning is delayed permanent streaks may remain.

Limitations of application

Before applying fermitopp HN 300 to any substrates(areas) previously treated with water-dilutable paint systems it is imperative to conduct adhesion tests. In case of poor adhesion the substrate must be primed. Any elements with areas covered with a white vamish/enamel coat should be stored in an upright position at a minimum distance of 5 cm after sealing in order to ensure access of air during curing. In rooms where dispersion paints are applied it must be ensured that the paint coats are completely dry with sufficient air supply for curing since combination with fermitopp HN 300 may result in discolouration of the sealant when sealing joints indoors. The product is not suitable for natural stone. Avoid contact with bituminous materials and with materials releasing plasticisers. When sealing laminated safety glass bonding between layers must be perfect. Consult our application engineering department before using the product with insulating glass.

Advice for application

Ensure sufficient ventilation during processing and curing. In view of the large number of factors which may effect processing and application the user must always try the specific application in an experiment before using the product. Take into account the expiry date of the product. 1-component silicone sealants are not suitable for full surface bonding. The curing time increases with the thickness of the layer. Before using 1-component silicone sealant in layers with a thickness of more than 15 mm get in touch with our application engineering department.

Storage and/or transportation of products at increased temperature/air humidity for a prolonged period of time (Several weeks) may result in a reduction of storage life and/or changes of characteristics of the product.

Priming

Adheres well without a primer on:

Glass, Tiles, Pine wood, Concrete (wet ground), Steel DC 04, Hot dip galvanized steel, High grade steel, Zinc, Aluminum, Aluminum AIMg1, Aluminum AICuMg1, Aluminum 6016, Aluminum anodized, Brass MS 63 hardness F 37, PVC plasticizes, Polystyrene PS Iroplast, PET, PU blend quality, Copper

Adheres well with a primer on:

Concrete, according to form work, rigid PVC Kömadur ES, Polyacrylic PMMA XT 20070 Röhm, ABS Metzoplast ABS 7 H, PMMA Röhm sanitary quality

Not suitable:

PC Makrolon Makroform 099, Mirrors, Natural stone

This list is based on adhesion tests with test solids of Rocholl corporation under laboratory conditions. Under field conditions the adhesion characteristics are dependent on a variety of external factors (weather, impurities, burdens etc). Therefore this list serves guidance only and does not constitute any binding statement. For more information get in touch with our application engineering department.

Liability for defects

The information provided including but not limited to the proposals for processing and using our products is based on our knowledge and experience, usually at the time of going into print. The results of work may derivate from this information depending on the specific circumstances, in particular with respect to substrates, processing and environmental conditions.

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Therefore, neither this information nor any oral counselling shall constitute warranty or give rise to any liability on whatever legal ground for any specific result of work, unless we acted intentionally or by gross negligence. Fermit warrants that its products will have the technical characteristics according to the Technical Data Sheets up to their expiry date. Product users must consult the latest data sheet which is available upon request. Our current General terms and conditions apply which are available on request, too.

Technical data

Basis: Neutrally cross linking oxime system; Meko-free
Skin over time: ~10 min. transparent(23°C/50% relative humidity)
Curing time: ~3mm/24 hours (23°C/50% relative humidity)
Density transparent: ~ 1.00 (EN ISO 1183-1)
Density coloured: ~ 1.34 (EN ISO 1183-1)
Shore hardness transparent: ~23 (EN ISO 868)
Shore hardness coloured: ~36(EN ISO 868)
Shrinkage: ~ 5% (EN ISO 10563)
Sag resistance: <3
Tear resistance, transparent: ~4.32 N/mm (ISO 34-1)
Tear resistance coloured: ~5.48 N/mm (ISO 34-1)
Stress at break: ~0.41 N/mm (EN ISO 8339)
Modulus: ~0.35 N/mm² (EN ISO 8339)
Elongation at break: ~160 % (EN ISO 8339)
Movement capability: approx.. 25 %
Temperature resistance: -50°C to + 200°C, short time up to 250°C
Processing temperature (substrate, environment): +5°C to +35°C
Storage life: 12 months in a cool and dry place
Colours: black, white, red
Packaging: 310 ml cartridges

Safety advice

Consult the current EC Safety Data Sheet which is available on our website www.fermit.com