

Technical data sheet E70931 – cartridges E90931 – pulling-can, drum

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Cross-linking Hot Melt

Part numbers: E70931 - cartridges
E90931 – pulling-can, drum

APPLICATORS : HB 700 K - series
HB Bulk Systems
HB Drum loader

APPLICATIONS

Constructive bondings demanding high standards of strength and temperature resistance while bonding wood, textiles, leather, foam, conveyor belt production and many plastics such as ABS, PVC, PE, PMMA, PC, PETP and PA.

PROPERTIES

A chemical cross linkage reaction produced by humidity of the air or moisture of the material is entering and results in characteristics of thermosetting plastics, good resistance against solvents, a high cohesion and a high elasticity even at low temperatures.

The fully cross-linked hot melt is in conformity with FDA-regulations 175.105 for the packing of food.

DESCRIPTION

Type : Hot melt based on prepolymer of polyesterurethane with isocyanate-groups
Colour : white/opaque
Marking : Xn, harmful (in compliance with the German regulations for dangerous materials and EEC Directive)

Hazardous material Share: Isocyanate, CAS-no. 101-68-8 about 2 percentage by weight

Prescription for treating : R-prescriptions, S-prescriptions (R = information on special hazards, S = safety advices)

TECHNICAL DATA

Softening point : approx. 65 °C (ring and ball) in the state of material as supplied
Heat resistance : approx. 165 °C (WPS 68, shearload 100 g/cm²) 72 h after application
Viscosity : approx. 13000 mPas at 120 °C (Brookfield) in the state of material as supplied
Specific gravity : approx. 1.10 g/cm³
Solids content : 100%
Working temperature : 130 °C - 140°C
Open time : approx. 240 s, depending on material and quantity of adhesive applied (strip shaped application, dia. 3 mm, 130°C, material strip (thickness 4 mm).
Setting time : approx. 420 s, depending on insulating effect of materials to be bonded and on application method and kind of material (see above open time).

Final strength : A careful handling of the bonded work-pieces is possible after the setting time. Final strength of the adhesive joint is reached after one day or later according to the chance of penetration of moisture.

Size : Alu cartridges - dia. approx. 47 mm, length approx. 215 mm
Pullring can, drum

When applying the hot melt by spray melt systems the value of the open time is reduced.

PACKAGING

Cartridges - content approx. 310 g, 35 pieces/pack
Pullring can - 2-kg-barrel in 20-kg-pack, 18-kg-barrel

Slight variation in the colour of the adhesive is normal and should not be seen as a quality problem.

STORAGE

Dry storage under indoor conditions and when stored in the original packing. Expiration date is marked on the cartridges and barrels.

SAFETY INSTRUCTIONS

Necessarily to observe the safety data sheet. Attention: Pre-heated cartridges, the nozzles of the applicator and the molten adhesive can reach temperatures of 140 °C Careless contacts result in skin burnings.

Take note of operating instructions of applicator and of cartridge preheater!

The working temperature of the hot melt adhesive has not to exceed the indication shown in the technical data sheet.

Even when using the hot melt within the correct temperature range a slight fume is produced. Even exceeding the working temperature for a longer period decomposition products are developing being harmful to one's health (see Safety Data Sheet).

APPLICATION

The surfaces to be bonded must be free of dust, dirt, moisture, grease, release agents. Attention: Plastic- and paint-materials containing plasticizers may destroy bond strength.

Apply adhesive as a spot, continuous strip or bead respectively spray a layer of sufficient thickness and join the parts together immediately. Short-time pressure will increase the bond strength. At a constructive bonding a full stress is not advisable before 72 h after the bonding.

As PU hot melts do react with moisture, it is recommended to drive bulk systems with a cover of nitrogen.

CLEANING

After working end the applicators have to be cleaned:
HB Bulk Systems with cleaner 91233 / 91233R
HB 700 K - series with cleaner 71233R

REMARKS

The details in our instruction sheets and other publications are provided to the best of our knowledge. Their contents are not, however, legally binding. In all cases, we recommend that preliminary tests are carried out by the customer. In all other respects, our General Terms of Sale apply. Professional advice and rapid response from our central office in Bremen, and our subsidiaries, ensure you of reliable service.