

# **Technical Data Sheet Infinity Bond PUR 250-30**

# **Infinity Bond PUR 250-30**

#### Overview

Infinity Bond PUR 250-30 is a high performance, general purpose PUR hot melt adhesive used for bonding a wide range of substrates. PUR 250-30 has a 30 second open time and excels when bonding wood, plastics, metals, foam, fabric and more.

## **Common Applications**

- Door panelling; e. g. bonding retainers and clips
- · Highly resistant assembly bonding
- Laminating cloth/carpet or PVC foils to wood based materials or plastic substrates

#### **Advantages**

- Low melting temperature
- · Creep strength is achieved quickly
- Good adhesion to many plastics (e. g. ABS), wood, wood fibre boards, aluminium
- No stringing
- Good bead stability on slanted surfaces

#### Properties of the bond

- Extremely high joint strength after curing
- Excellent resistance to heat, to more than 100℃ (depending upon the material used)
- Cold resistant down to -40℃ (depending upon the material used)

### Properties of the adhesive

Base: polyurethane
Density: approx. 1.1 g/cm³

Viscosity (on the day of production) -Brookfield HBTD 10 Upm:

at 120°C:  $25.000 \pm 8.000$  mPa s at 140°C:  $15.000 \pm 5,000$  mPa s

**Identification:** identification required

according to EU regulations;

contains diphenylmethane-

4,4'-diisocyanate

(see our safety data sheet)

Note: Intended for commercial

use only.

#### Attention:

When hotmelt adhesives are melted and applied, vapours are set free and an unpleasant odour can occur, even if the recommended working temperature has been observed. Moreover if the prescribed working temperature is exceeded over a longer period, harmful decomposition products can develop. Precautions should be taken to eliminate the vapours, e.g. by using a suitable ventilation system.

# **Application techniques** Clip bonding:

Infinity Bond PUR 250-30 is supplied in factory sealed metal containers suitable for use in melting devices. The hot melt applicators should be designed to protect the hot melt from being directly exposed to humidity. Special care is to be taken for precise temperature control of the equipment, (record start operation data of the machine).

The adhesive is usually applied to the substrate with nozzles from cartridges or robots. The application temperature ranges between 120-130  $\odot$ .

The creep strength depends on material and glue quantity applied and begins at 60 seconds upwards.

Cross-linking of the adhesive film occurs within 1-3 days, depending on the humidity supply.

Chemical cross linking of PUR hot melts requires moisture. Therefore sufficient air humidity has to be present during processing.



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#### Assembly bonding:

Infinity PUR 250-30 is applied with a hand applicator from a cartridge (smallest packing size), or for higher quantities from 2 kg metal tins, 18 kg or 200 kg metal drums. Appropriate melting systems are required. It is also possible to apply the adhesive with the swirl-spray method (Foam-Melt®)

FoamMelt® is a registered trademark of Nordson Corporation

# Cloth and foil lamination to wood and plastic substrates:

Infinity PUR 250-30 can be applied by application rollers, spray nozzles or other nozzles onto wood or foil materials. The application temperature is from 120℃ to 130℃. After the adhesive has been activated (infra-red light), lamination is carried out in a form press or in a vacuum press.

# Application temperature: 120-140°C Open time:

Up to 30 seconds for a bead thickness of 2 mm on chipboard.

The open time is influenced by substrates, working temperature, temperature of material, as well as the method of application (swirl-sprayed or not)

## Pressing time:

from 3 seconds onwards

The better the heat dissipation, the shorter the pressing time.

## **Application devices**

- Hand cartridge pistol for manual application
- Melting tanks with a nitrogen blanket
- Bulk melter systems for 20 litre drums

### Cleaning

When having finished work with Infinity PUR 250-30, empty the applicator, draw off the residual hot melt and insert Cleaning Compound (if not using disposable nozzle), melt the cleaning compound and flush until the last residues of PUR hot melt have been removed.

Cured hot melt can only be removed mechanically.

#### **Available Sizes:**

- •10 Ounce (300 Gram) Cartridges
- Holz-Her Slugs
- Metal Drums

Additional packaging sizes available upon request.

#### Storage

Infinity PUR 250-30 can be stored in factory sealed containers as follows:

cartridge, approx. 12 months fiber drum with aluminum bag (2 kg), approx. 12 months drum, approx. 12 months

Protect from humidity.

#### Waste Disposal

Disposal of contents and/or containers should comply with all applicable federal, state and local regulations. Our containers are made of recyclable material.

#### Service

Our application department may be consulted at any time without obligation. The statements made herein are based on our experience gained to date. They are to be considered as information without obligation. Please test and establish for yourself the suitability of our products for your particular purposes. No liability exceeding the value of our product can be derived from the foregoing statements. This also applies to the technical consultancy service which is rendered free of charge and without obligation.