

BETASEAL™ 8000-1F

Short Description

One component, moisture curing adhesive with excellent sag and bead stability based on polyurethane chemistry. The adhesive cures with environmental moisture and skin formation and curing is dependent on humidity, temperature and application dimensions.

Properties

Cold processable, medium viscosity, low modulus adhesive with excellent UV stability attributes. It is primerless to paint on automotive paints.

Application

All Dow Automotive products are primarily developed in co-operation with the automobile manufacturers, according to their needs and their specifications, they are approved for the specific applications as defined by the customer. The use of the product other than approved application have to be released in written form by the Technical Service of Dow Automotive Systems.

Technical Data

Unless specified otherwise test are conducted at 23°C/50% relative humidity.

Basis Polyurethane prepolymers

Colour black

Density 1.22 - 1.26 g/cm³

Solid contents min 98% Viscosity Extrusion, Ballan at 23°C, 12 - 20 g/min

4mm nozzle / 4bar

Processing temperature 10 - 40°C
Skinning time 25 - 45 min
Cure rate after 48h min 3.5 mm
Sagging, on vertical wall tilting max 30°
Hardness Shore A (DIN 53 505) 55 - 65

Lap shear strength (DIN EN 1465) min 5.0 MPa after 7d

Tensile strength (DIN 53 504) 9 MPa Elongation at break (DIN 53504) > 500% G-Modulus 1.0 - 1.5 MPa Specific electrical volume resistivity $10^6 \ \Omega \text{cm}$ Temperature stability -40°C to 100°C

Resistance to chemicals Highly resistant to aqueous chemicals, petrol, alcohol and mineral oils;

conditionally to esters, ketones, aromatics and chlorinated hydrocarbons.

Bonding surface preparation All bonding surfaces must be free of dirt, dust, water, oil and grease. In

general surfaces should be primed. Verify compatibility or consult our

technical service department.

Cleaning Uncured adhesive residues can easily be removed with BETACLEAN™

3500. Hardened adhesive residues can only be removed mechanically.

Immerse equipment in BETACLEAN™ 3000.

Shelf life Short time storage temperatures: 0°C to 40°C. 6 months at +5°C to +25°C

in unopened containers.

Containers Cartridges / Pails / Drums



Technical Datasheet

Health and Safety

The use of polyurethane adhesives is generally harmless and as long as the basic rules for safe handling of chemicals are applied. However, the direct contact of uncured adhesive with food and food containers should be avoided. It is mandatory to use protective measures in order to prevent direct skin contact. Suitable gloves and eye protection are essential. Should the skin come into contact with uncured adhesive, it must be rinsed first with warm water and then cleaned thoroughly with conventional soap. Cleaning skin with solvents must be avoided. It is essential to ensure good ventilation. For detailed protective measures refer to the Material Safety Data Sheets.

Dow Automotive Systems Quality Assurance

Quality is our utmost goal. Dow Automotive works according to a modern quality management system conforming to ISO/TS 16949. Environment: All sites of Dow Automotive are conforming to ISO 14001.

All statements, technical information and recommendations contained in this document are based on tests that we believe are reliable. However, the accuracy or completeness of the statements, information and recommendations is not guaranteed, as before using, the user should determine the suitability of the product for user's intended purpose.

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