# BECKOPOX™ EP 386w/52WA

Technical Datasheet

## TYPE

Solid epoxy resin; flexibilized; dispersion in water

## FORM OF DELIVERY (f.o.d.)

52 % in water (52WA)
(containing also approx. 4.7 % propoxy ethanol)

## SPECIAL PROPERTIES

Internally plasticized solid resin-Type 1-dispersion with improved shear stability, e. g. for water reducible fast drying anticorrosion primers and coatings for plastics.

## PRODUCT DATA

**Determined per batch:**

| | | |
|---|---|---|
| **Dynamic Viscosity DIN EN ISO 3219** | | |
| dynamic viscosity (100 1/s; 23 °C) | [mPa.s] | 300 - 1500 |
| **Epoxy-Equivalent VLN 305** | | |
| epoxy equivalent (form of delivery) | [g/mol] | 900 - 1100 |
| **Epoxy-Equivalent VLN 305** | | |
| epoxy equivalent (non volatile matter) | [g/mol] | 485 - 550 |
| **Non-Volatile Matter DIN 55671** | | |
| non-volatile matter (125 °C; 6 min; 0,7 - 1,0 g) | [%] | 50 - 54 |

**Not continually determined:**

| | | |
|---|---|---|
| **Non-Volatile Matter DIN EN ISO 3251** | | |
| non-volatile matter (1 h; 125 °C; 1 g) | [%] | 50 - 54 |
| **Colour / Appearance VLN 250** | | |
| colour | | whitish |
| **Density (Liquids) DIN EN ISO 2811-2** | | |
| density approx. (20 °C) | [g/cm³] | 1,08 |
| **Flash Point (Pensky-Martens) DIN EN ISO 2719** | | |
| flash point | [°C] | > 100 |

## SUGGESTED USES AND PROCESSING

Beckopox EP 386w is an internally plasticized type 1solid epoxy resin as aqueous dispersion.

Formulated together with adequate curing agents such as e. g. Beckopox EH 613w or VEH 2188w it is suited for corrosion protection primers with very good adhesion to most metallic substrates. It is also suitable for use in single coat and decorative systems for metallic substrates. For optimium corrosion protection it is recommended using 80 % of the stoichiometric curing agent quantity.

Dispersion of pigments and fillers can be done in Beckopox EP 386w if the temperature does not exceed 40 °C.

The formulated paint stability can be influenced by the additives used so that it is important to investigate their suitability thoroughly; such additves should not contain functional groups capable of reacting with epoxy groups.

## MIXING RATIO AND POT LIFE

A blend of

100.0 g Beckopox EP 386w/52WA
14.5 g Beckopox EH 613w/80WA
22.5 g deionized water

has a pot life at 23 °C of approx. 2.5 hours. It is necessary to use the material within the stated time limit. The substrate temperature should not be below 12 °C and the relative humidity not above 80 %.

## STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 270 days.

It is important to protect Beckopox EP 386w from frost and direct sunlight; at low temperatures it has to be stored under frostproof conditions.

As a result of the high solids content of the product and the solid resin character of the polymer, the product tends to form a tiny skin upon foaming and temperature changes during storage. Therefore filtration of the product (without heating) before applied by the end-user is recommended.
The viscosity of Beckopox EP 386w can drop during storage.

**Lowest storage temperature: 5 °C**

## DISTINGUISHING FEATURES

Beckpox EP 386w is internally plasticized and therefore more flexible than Beckopox EP 384w.
Pigments and fillers can be dispersed in Beckopox EP 386w.

## SAFETY AT WORK AND ENVIRONMENTAL PROTECTION

When handling and processing epoxy resins and hardeners, the rules and regulations established by local authorities should be observed.
A Material Safety Data Sheet is available on request.