

PRELIMINARY PRODUCT INFORMATION

TYPE

Type 7 solid epoxy resin dispersion in water

FORM OF DELIVERY (f.o.d.)

45 % in water/methoxypropanol (45WAMP)

DEVELOPMENT PRODUCT

This product is serving for trial purposes only. Deviations which might occur during transfer into manufacturing in a commercial scale are possible and do not constitute any material defect.

TENTATIVE PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (100 1/s; 23 °C)	[mPa.s]	500 - 1500
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Epoxy-Equivalent VLN 305

epoxy equivalent (form of delivery; 1,2-propylene carbonat/glac.ac.acid 4:1; 0,6 - 0,8 g; potentiometric)	[g/mol]	3800 - 5000
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Non-Volatile Matter DIN 55671

non-volatile matter (125 °C; 10 min)	[%]	43 - 47
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Not continually determined:

Hydroxyl Value DIN EN ISO 4629 (VLN 283)

hydroxyl value (solid matter content; phenolphthalein)	[mg KOH/g]	200
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Density (Liquids) DIN EN ISO 2811-2

density (20 °C)	[g/cm ³]	1,08
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Flash Point (CCCFP) ASTM D 6450

flash point	[°C]	> 95
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SPECIAL PROPERTIES AND USES

Beckopox EP 2307w/45WAMP is a high-molecular epoxy resin (Type 7) dispersion. In combination with suitable crosslinkers (amino or phenolic resins and accelerators) it is possible to formulate stoving enamels with excellent chemical and heat sterilisation resistance and good adhesion and corrosion performance. The mixing ratio of binder to crosslinker can vary from 85 : 15 up to 70 : 30 (calculated on solids). The stoving conditions depending on the crosslinker are in the range of 30 minutes 140 °C up to 10 minutes at 200 °C resulting in coatings with high hardness and high chemical resistance.

Due to its high hydroxyl value Beckopox EP 2307w is also suited for cross-linking with (blocked) polyisocyanates under at least forced drying.

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 2307w/45WAMP from frost; at low temperatures it has therefore to be stored under frost proof conditions.

As a result of its fast physical drying the product tends to form a tiny skin. Therefore filtration of Beckopox EP 2307w/45WAMP (without heating) before applied by the end-user is recommended.

DISTINGUISHING FEATURES

Beckopox EP 2307w/45WAMP posses a higher molecular weight than Beckopox EP 384w/53WAMP and shows therefore a better flexibility and hardness.

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.

REMARK:

Data contained in this publication are based on careful investigations (and are intended for information only). Due to scale up of this product there is not yet sufficient experience concerning serial production. We can therefore not exclude, that based on future knowledge product data and other indicated properties in upcoming Technical Data Sheets will be subject to change. We reserve the right to leave the product name unchanged, even if product data or other indicated properties will vary from the present product info. Regardless of the data contained in this publication any user is obliged to carry out tests under his own responsibility as to the suitability of the product for a particular use and to investigate the possible violation of industrial property rights of third parties. Information is therefore not binding and cannot be construed as guaranteeing specific properties of products. We apply our General Sales Conditions.