

TYPE

Aliphatic polyamine adduct

FORM OF DELIVERY (f.o.d.)

80 % in water (80WA)

(Significant turbidity is possible)

H-equivalent-weight

(f.o.d.) 142 g/mol
(solid matter) 114 g/mol

Lowest storage temperature: - 15 °C

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity	[mPa.s]	14000 - 25000
(10 1/s; 23 °C)		

Amine Value (Reaction Resins) DIN 16945 / 5.6

amine value	[mg KOH/g]	220 - 240
(form of deliver)		

Iodine Colour Number DIN 6162

iodine colour number		<= 20
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Not continually determined:

Density (Liquids) DIN EN ISO 2811-2

density	[g/cm ³]	1,08
approx.		
(20 °C)		

Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point	[°C]	> 100
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SPECIAL PROPERTIES AND USE

Beckopox VEH 2106w is used together with solid epoxy resin dispersions or emulsified liquid resins.

In combination with Beckopox EP 384w and Beckopox EP 147w, Beckopox VEH 2106w is suited to formulate coatings for mineral substrates; they exhibit very fast drying, are abrasion-resistant and good chemical-resistant. When used with Beckopox EP 385w coating systems for metallic substrates can be formulated with excellent water and saltspray resistance. The use of 80 % of the stoichiometric curing agent quantity has given best results. At room temperature the film cures rapidly and can also be forced dried at elevated temperatures.

Beckopox VEH 2106w shows in the combinations mentioned above the end of processing time by noticeably increasing of viscosity resp. gelation.

When using solid epoxy resin dispersions, pigment dispersion is mostly carried out in the curing agent component. When reducing with water it should be ensured that the concentration is not lower than 20 %. It is also important that the mill base temperature does not exceed 40 °C.

MIXING RATIO AND POT LIFE

A blend of

100.0 g Beckopox EP 385w/56WA
15.9 g Beckopox VEH 2106w/80WA
28.1 g deionized water

has a processing time at 23 °C of approx. 90 min, the starting viscosity increases within this period 100 - 200 % (measured at shear rates of approx. 10 1/s), gelation starts after several hours.

Prolongation of processing time can be achieved by 1 : 1 combinations of Beckopox VEH 2106w with slower curing hardeners, e.g. Beckopox EH 623w.

STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 365 days.

Synthetic resins containing water may freeze or get inhomogeneous at temperatures below 0 °C. By this the product will not suffer any damage, but the necessary regeneration requires extended heat treatment at 40 - 50 °C with continuous stirring. It is therefore recommended to ensure frostproof storage of such products.

DISTINGUISHING FEATURES

Beckopox VEH 2106w shows similar results to Beckopox EH 613w concerning reactivity and corrosion-resistance but it shows the end of processing time by an increase of viscosity.

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.