

TYPE

Aliphatic polyamine adduct

H-equivalent weight

form of delivery: 380 g/mol

solid matter: 215 g/mol

FORM OF DELIVERY (f.o.d.)

55 % in water (55WA)
(containing also ca. 5 % propoxyethanol)

SPECIAL PROPERTIES

Hydrophobic amine hardener especially for the formulation of waterborne metal coatings (primers, single coats), free of volatile basic amines.

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity	[mPa.s]	6000 - 14000
(10 1/s; 23 °C)		

Amine Value (Reaction Resins) DIN 16945 / 5.6

amine value	[mg KOH/g]	130 - 140
(form of deliver; propylene carbonate / acetic acid 4:1)		

Iodine Colour Number DIN 6162

iodine colour number		<= 25
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Not continually determined:

Density (Liquids) DIN EN ISO 2811-2

density	[g/cm³]	1,08
approx. (20 °C)		

Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point	[°C]	> 85
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SUGGESTED USES AND PROCESSING

BECKOPOX VEH 2188w is used together with solid epoxy resin dispersions or emulsified liquid resins. When used with solid resin dispersions coatings for metallic substrates can be formulated with excellent performance in humidity chamber and salt spray tests. It has been shown that best results are obtained using 70 - 80 % of the stoichiometric amount of hardener. The films cure rapidly at room temperature but can also be dried at elevated temperatures.

Grinding of the pigments should be done in shear stable epoxy dispersions (e. g.: BECKOPOX EP 384w, BECKOPOX VEP 2381w/2382w) because wetting properties of the hardener are not very good due to the hydrophobic backbone of the polymer and the absence of free basic amines. The mill base temperature should be as low as possible and should not exceed 40 °C at maximum. Also the use of binder-free pigment pastes is possible.

It is essential to apply the paint within the time stated for its pot-life because the end of the pot-life cannot be detected by an increase of viscosity.

MIXING RATIO AND POT LIFE

A blend of:

100.0 g	BECKOPOX EP 384w/53WAMP
39.0 g	BECKOPOX VEH 2188w/55WA
7.0 g	Deionized water

(= 100 % of the stoichiometric amount of hardener) has a processing time of approx. 90 - 120 minutes at 23 °C. The end of pot life cannot be seen by an increase of viscosity or gelation. Therefore it is necessary to use the paint within the stated time limit.

STORAGE CONDITIONS

The recommended storage temperature ranges from -5 - 25°C. Store the tightly closed container in a cool, dry and well ventilated place.

SHELF LIFE

Standard Shelf Life is 365 days from the date of manufacturing.
For products still in allnex possession allnex may extend the expiration date of a batch upon re-testing by QC.

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.

DISTINGUISHING FEATURES

BECKOPOX VEH 2188w is lower in reactivity than BECKOPOX EH 613w and free of volatile basic amines. BECKOPOX VEH 2188w is especially suited for metal anticorrosion primers (together with BECKOPOX EP 384w) or metal single coats (together with BECKOPOX VEP 2381w or VEP 2382w).