

RESYDROL[®] AX 237w/70BG

TYPE

Water-dilutable oxidative drying epoxy resin ester

FORM OF DELIVERY (f.o.d.)

70 % in butyl glycol (70BG), not neutralized

SPECIAL PROPERTIES AND USE

Sole binder for air-drying corrosion protection coatings. In combination with suitable melamine resins also for stoving systems. With polymer emulsions for air-drying coatings for wood and plastic.

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219 dynamic viscosity (25 1/s; 23 °C)	[mPa.s]	8000 - 14000
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Iodine Colour Number DIN 6162 iodine colour number		<= 15
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Acid Value DIN EN ISO 2114 acid value (solids)	[mg KOH/g]	45 - 55
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Non-Volatile Matter DIN 55671 non-volatile matter (120 °C; 5 min)	[%]	68 - 72
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Not continually determined:

Non-Volatile Matter DIN EN ISO 3251 non-volatile matter (1 h; 125 °C; 2 g)	[%]	68 - 72
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Density (Liquids) DIN EN ISO 2811-2 density approx. (20 °C)	[g/cm ³]	1,02
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Flash Point DIN EN ISO 1523 flash point approx.	[°C]	63
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DILUTABILITY

Resydrol AX 237w/70BG must first be neutralized prior to reduction with deionized water. The most suitable neutralization agent for air-drying systems is triethyl amine and for stoving systems dimethylethanol amine. The pH should be adjusted between 8.7 and 9.3 The pH is best measured on a 20 % solution with a pH meter.

When reducing with deionized water opaque solution develops. The turbidity disappears during drying so that clear glossy films result. Alcohols and glycol ethers can be used as cosolvents to help lower the viscosity.

COMPATIBILITY

Resydrol AX 237w/70BG is preferably used as sole binder. It is compatible with many water reducible resins and aqueous emulsions.

For improving reaction speed in air-drying systems a combination with acrylic emulsions is useful. For stoving it is recommended using methylated melamine resins. The compatibility should in all cases first be checked.

SUGGESTED USES

Resydrol AX 237w/70BG has a high pigment loading capacity, rapid curing and very good corrosion protection properties.

As sole binder it can be used for air-drying corrosion protection primers. In combination with acrylic emulsions it can be used for air-drying and forced cured coatings for metal, plastic and wood. Crosslinked with melamine resins it is used for durable stoving systems.

As a typical epoxy ester Resydrol AX 237w/70BG is susceptible to chalking and tends to discolor. In contrast to conventional primers even moist metallic substrates or wet wood can be overpainted without reduction in adhesion or surface defects. The coating can be applied by brushing, spraying or dipping. Forced drying is possible.

PROCESSING

Pigmentation

Pigments can be dispersed in the acidic resin as supplied or even after neutralization. In the acidic form it is recommended to use a triple-roll mill. It is preferred to use a pearl mill for neutralized systems reduced with deionized water.

The high pigment loading capacity of Resydrol AX 237w/70BG makes it possible to formulate primers with a binder-/pigment ratio of 1 : 3 on solids. All pigments and extenders suitable for conventional systems can be used with exception of strong basic pigments and ionic surface treated pigments such as talc and zinc chromate, which can lead to gellation.

To improve the corrosion resistance it is recommended using up to 15 % zinc phosphate on total pigment solids.

Driers

Resydrol AX 237w/70BG as oxidative drying resin needs driers to accelerate drying. Co driers in quantities of up to 0.2 % on solid resin gives the best results. The use of not water reducible cobalt octoates or naphthenates should be added prior to reduction with water to avoid flocculation.

For water reduced Resydrol AX 237w/70BG water-emulsifiable Additol VXW 4940 can be used without difficulty as drier.

Antiskinning agents

To prevent skin formation the use of 0.5 - 1 % Additol XL 297 on solid resin is recommended.

STORAGE

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

DISTINGUISHING FEATURES

Resydrol AX 237w/70BG as an epoxy resin ester shows in comparison to nonepoxy-modified resins highest corrosion-protection properties.

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• Worldwide Contact Info: www.allnex.com •

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