

TYPE

Water dilutable, fatty acid modified alkyd resin in aqueous emulsion

Neutralization agent

2,5 % N,N-dimethylethanolamine, as salt

FORM OF DELIVERY (f.o.d.)

40 % in water (40WA)
(containing also 4 % Methoxypropoxypropanol)

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity	[mPa.s]	100 - 700
22 % methoxy propoxy propanol (25 1/s; 23 °C)		

pH-Value DIN ISO 976

pH-value (10 %)		7,5 - 9,0
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Non-Volatile Matter DIN EN ISO 3251

non-volatile matter (1 h; 125 °C; 1 g)	[%]	38,5 - 41,5
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Not continually determined:

Colour / Appearance VLN 250

colour		brown
appearance		clear to opaque

Density (Liquids) DIN EN ISO 2811-2

density approx. (20 °C)	[g/cm ³]	1,07
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Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point	[°C]	> 100
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SPECIAL PROPERTIES

Very good pigment wetting.
Excellent application properties.
For stoving primers, one coat and decorative industrial finishes.

SUGGESTED USES

For film formation Resydrol AM 224w must be crosslinked with amino resins suitable for aqueous systems. Hexamethoxymethylmelamine resins are recommended. The use of more reactive melamine resins will limit storage stability.

The stoving range is 140 - 180 °C.

With help of cosolvents (< 5 %) the formulated coating can be applied using standard spraying techniques. The cured films have good gloss and body.

Its main use is to formulate automotive primer surfacers with faultless processing and good resistance to stone impact damage.

PROCESSING

Resydrol AM 224w requires melamine resins suited for waterborne systems for curing. Recommended are hexamethoxymethylmelamine resins in a ratio of 90 : 10 to 75 : 25 on solid resin.

Adjustment of pH value

If adjustment of the pH value is required, this is best done with dimethylethanolamine.

Pigmentation

Resydrol AM 224w has very good pigment wetting properties and can be processed with all pigments and fillers suitable for watersoluble systems. The use of strong basic pigments should be avoided since they tend to gellation. TiO₂ grades modified with zinc oxide should not be used. The use of active anticorrosive pigments should first be carefully tested. For pigment dispersing sand or pearl mills are best suited. The milling temperature should not exceed 50 °C. Paints on the basis of Resydrol AM 224w show very good storage stability if the recommended pH range (preferably 8.0 - 8.5) is carefully observed.

Dilution

Preferably with deionized water. Simultaneous use of solvents (e. g. glycol ether) is possible.

COMPATIBILITY

Resydrol AM 224w is compatible with Resydrol AX 246w, Resydrol AX 906w and Resydrol VAX 5527w as well as with water dilutable melamine resins. Resydrol AM 224w can be easily combined with fatty acid modified alkyd resins or aqueous oil-free polyester resins, but such combinations should first be tested.

STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 180 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. Lowest storage temperature: - 3 °C

DISTINGUISHING FEATURES

Compared with Resydrol AF 502w Resydrol AM 224w is less fatty acid modified and gives better film flexibility.