

# Synthetic Resin EP-UC W 40 (preliminary)

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## General Description

Synthetic Resin EP-UC W 40 is an aqueous solution of a special modified polyether ketone resin, used as a wetting and dispersing additive for waterborne and solventborne coatings due to its universal solubility and compatibility and excellent pigment wetting.

## Specification

Property	Value	Unit	Test method
Nonvolatile matter	39 - 41	% by wt.	DIN EN ISO 3251 (60 min. 120°C)
<b>Typical data</b>			
Appearance	yellowish	-	visual
Viscosity at 23 °C	approx. 150	mPa s	DIN EN ISO 3219
Acid number	≤ 1	mg KOH/g	DIN EN ISO 2114
Density at 20 °C	1.04	g/cm <sup>3</sup>	DIN 51 757 / ISO 758

## Chemical Classification

Aqueous solution of a special modified polyether ketone resin with pigmentaffinic groups

## Supply form

Yellow liquid

## Storage Stability and Packaging

Plastic drums, 25 kg net wt.

Synthetic Resin EP-UC W 40 has a shelf life of at least one year providing it is stored at temperatures below 25 °C with exclusion of light and dampness.

## Compatibility

In order to test the compatibility of Synthetic Resin EP-UC W 40 with binders corresponding solutions or dispersions, respectively, were mixed in such a way that 20 and 40 % of synthetic resin, based on the respective binder, were added.

After application to glass and drying, the dry films were assessed for appearance. Individual data are shown in the following table.

<b>Waterborne binders</b>	<b>Compatibility with Synthetic Resin EP-UC W 40</b>
Acrylic dispersions	+
Alkyd resins, water-dilutable	+
Alkyd dispersions	+
Poly(meth)acrylate dispersions	+
Polyurethane dispersions	+
Polyvinylacetate dispersions	+
Styrene-acrylic dispersions	+

+ = compatible

± = limited compatibility, in some cases slight film haze

- = incompatible

## Application

Synthetic Resin EP-UC W 40 is particularly suitable for the production of waterborne pigment concentrates due to its universal compatibility with usual binders in waterborne systems and its good pigment wetting properties. The color strength development with organic and inorganic pigments and carbon blacks is excellent. Synthetic Resin EP-UC W 40 is free of solvents and nonylphenolethoxyolate.

Synthetic Resin EP-UC W 40 is added to the grind before dispersion. The foam build up during pigment dispersion in water is significantly reduced. In the case of little foam build up it is decomposed rapidly. Normally, it is not needed to use a defoamer.

Guide formulations for pigment concentrates based on Synthetic Resin EP-UC W 40 are available on request.

## Safety and Handling

Please refer to our Material Safety Data Sheet.

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