

# Synthetic Resin DS 50

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## General Description

Synthetic Resin DS 50 is a solvent-free, aqueous dispersion of a polyurethane polyol resin. It can be combined with other film formers to manufacture aqueous lacquers, printing inks and pigment concentrates to improve hardness, adhesion, gloss and drying. The dispersion is characterized by an excellent stability and pigmentability. It is unsaponifiable, lighfast and light-resistant. Because of its good pigment wetting properties Synthetic Resin DS 50 increases the pigment loading capacity, making it possible to obtain an outstanding gloss even at high levels of pigmentation.

## Specification

Property	Value	Unit	Test method
Nonvolatile matter	31 - 35	% by wt.	DIN EN ISO 3251 (60 min. 105°C)
pH value	8.5 - 9.5	-	DIN ISO 976

## Typical data

Appearance	whitely opaque	-	visual
Viscosity at 23°C	approx. 400	mPa s	DIN EN ISO 3219 (D =200 s <sup>-1</sup> )
Density 25°C	approx. 1.053	g/cm <sup>3</sup>	DIN 51 757 ISO 758

## Chemical Classification

Aqueous dispersion of a polyurethane polyol resin

## Supply Form

Approx. 33 % b.wt. in dem. water

## Storage Stability and Packaging

Plastic (PE) drum, net contents: 25 kg  
Plastic (PE) drum, net contents: 200 kg.

Synthetic Resin DS 50 has a shelf life of 1 year when stored between 5 °C and 25 °C (41 °F and 77 °F) in the absence of light. Temporary occurrence of temperatures of +5 to -15 °C (41 °F to 5 °F), e.g. during transport or storage, does not narrow the use of the product after its redefrosting.

## Applications

Owing to its good pigment wetting ability and good compatibility with the usual binders in waterborne systems, Synthetic Resin DS 50 is suitable for the preparation of aqueous pigment pastes and as a supplementary resin in waterborne systems for improving hardness, drying, adhesion and gloss.

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