

# Acronal® NX 2160

Acronal NX 2160 is an APEO-free, aqueous acrylate copolymer emulsion intended for the production of pressure-sensitive adhesives that exhibit adhesion performance over a wide temperature range

## Chemical Nature

Acrylic copolymer dispersion containing carboxyl groups

## Properties

### Typical Properties

Solids content	%	~ 65
pH value		~ 4.0
Viscosity at 23 °C (Brookfield RV, Spindle #3, at 50 rpm)	cP	500 – 1000

### Further properties of the dispersion

Density	g/cm <sup>3</sup>	approx. 1.01
Average particle size	µm	approx. 0.7
Film-forming temperature	°C	< 1 min.
Freeze/thaw resistance		not resistant to freezing
Dispersion type		anionic

### Properties of the film

Bulk density	g/cm <sup>3</sup>	ca. 1.04
Glass transition temperature T <sub>g</sub> (DSC)	°C	ca. -58
Appearance		clear, transparent
Stability to light		good
Surface		highly tacky

## Compatible with

<i>Polymer dispersions</i>	Anionic dispersions and those containing a protective colloid
<i>Thickeners</i>	Rheovis® PU, Rheovis® AS 1125
<i>Plasticizers</i>	Acronal® NX 2160 is designed to perform without the addition of plasticizers.
<i>Resins</i>	Modified and unmodified natural resins; these are added as solutions or dispersions

## Application

Acronal NX 2160 forms a film with good immediate tack, moderate peel strength and good cohesion. It is used to manufacture pressure-sensitive adhesives for self-adhesive articles, particularly those applications requiring adhesion at low temperatures.

Coatings that contain Acronal® NX 2160 also have good adhesive properties at low temperatures, are relatively insensitive to water, and adhere very well to films of plasticized and unplasticized PVC, polyester and electrically treated polyolefin films, even without an adhesion promoter.

## **Processing**

When Acronal NX 2160 is to be mixed with another dispersion, the pH should be raised to 6 – 8 which increases the mechanical stability.

Adhesives based on Acronal NX 2160 can be applied to the carrier material with the usual coating systems; e. g., doctor blade, wire, air brush, reverse roll, reverse gravure, curtain and jet applicators. In the event of poor wetting, it is often helpful to add about 0.5 % of a wetting agent such as Lumiten® I-SC.

We recommend adding a preservative to adhesives and coating materials that contain Acronal NX 2160 to protect them from microbial attack, particularly if their pH lies in the neutral range. The suitability of such additives must be verified and monitored in trials.

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## **Safety**

### **General**

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State and Local health and safety regulations, thorough ventilation of the workplace, good skin care and wearing of protective goggles.

### **Safety Data Sheet**

All safety information is provided in the Safety Data Sheet for Acronal NX 2160.

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## **Storage**

Please refer to the “Handling and Storage of polymer dispersions” brochure.

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## **Important**

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