



Industrial coatings

with NECOWEL™ alkyd emulsions



RESINS FOR PAINTS AND COATINGS

Excellent **performance**,
first-class **application** and
environmental compatibility.
Tailor-made for you.



As a **specialist** in very **effective resin emulsions** for **water-based industrial coatings**, ASK Chemicals offers a wide range of solutions for this area. In addition to excellent performance, highly efficient binding agents from ASK Chemicals also feature very good environmental compatibility and top-class application properties. This makes them ideal for switching from solvent-based to water-based systems without having any compromise on performance.

Your benefits at a glance:

- Good product quality thanks to high performance resin systems
- Top-class customer service, tailor-made modifications and refinement
- Our alkyd emulsions are based on natural oils and feature a high percentage of renewable raw materials.
- NECOWEL™ products are VOC-free and meet all environmental-friendliness and occupational health and safety requirements.



NECOWEL™

Primers and top coats

PU-modified alkyd emulsions are the first choice to formulate air- and forced drying industrial coatings. PU-modified alkyds exhibit better drying properties than standard alkyds. Due to the reaction isocyanate/alkyd, the molecular weight of alkyds increases and creates improved physical drying properties. After the physical drying (evaporation of water) the chemical drying (oxidative drying) takes place. Additionally the PU-modification improves weather and water stability. For primers on wood and metal cost



NECOWEL™

Baking enamels

For formulating baking enamels unmodified alkyd emulsion in combination with aminoplasts like melamine or urea/ formaldehyde resins are recommended. These enamels exhibit outstanding gloss and low yellowing tendency in combination with good chemical resistance. Unmodified alkyd emulsions like NECOWEL™ 580 are widely used in combination with acrylates to improve flow characteristics and gloss.



NECOWEL™

2K PU-coatings

Water-based 2K PU-coatings tend to blister, if they are applied in high film thickness. The reason for this blistering is CO₂ formation due to the reaction of isocyanates with water. Coatings based on NECOWEL™ are more tolerant compared to the state of the art and can be applied with high film thickness in one layer. The chemical resistance of 2K PU-coatings depends on its cross linking density which is influenced by the OH-content of the polyol and the type of

efficient aromatic PU-modified alkyd emulsions are preferred. They combine fast drying, good corrosion resistance and good compatibility with anticorrosive pigments. For top coats aliphatic PU-modified alkyd emulsions are preferred. They offer fast drying, outstanding gloss, good UV resistance and very low yellowing tendency.

Application areas

Machinery, agriculture and construction equipment, corrosion protection, wood coatings

Benefits

- Good corrosion resistance
- High gloss finish
- Good shear resistance and stability
- Fast drying properties
- Very low smell
- VOC-free

Due to their excellent wetting properties and shear resistance NECOWEL™ 580 can also be used as grinding resin for pigment pastes.

Application areas

Outside drum coatings, machinery, steel furniture

Benefits

- Easy-to-formulate
- Excellent wetting properties
- Good chemical resistance
- VOC-free

isocyanate. NECOWEL™ 700 is a polyester polyol that offers high OH content for very high chemical resistance, for example to graffiti removers. As cross linking agent we recommend oligomeric isocyanates based on HDI or IPDI. Especially hydrophilic modified isocyanates are easy to incorporate.

Application areas

Railway coatings, trucks and public transportation vehicles, construction, machinery, floor coatings

Benefits

- Low blistering tendency
- No yellowing
- Brilliant gloss finish
- Excellent chemical resistance
- VOC-free

NECOWEL™ Properties and technical data:

NECOWEL™ – Primers

Product	Type of oil	Oil length	Properties
NECOWEL™ 585	Sunflower oil	20 %	Fast drying at ambient and elevated temperatures
NECOWEL™ 586 N	Soy bean oil	50 %	Good corrosion resistance and wetting properties

NECOWEL™ – Top coats

Product	Type of oil	Oil length	Properties
NECOWEL™ 2329	Spec. fatty acids	35 %	Drying at ambient and elevated temperatures, high gloss
NECOWEL™ 5088	Spec. fatty acids	35 %	Fast drying at ambient and elevated temperatures, high gloss
NECOWEL™ 5286	Spec. fatty acids	35 %	Very fast drying at ambient and elevated temperatures

NECOWEL™ – Baking enamels

Product	Type of oil	Oil length	Properties
NECOWEL™ 580	Sunflower oil	20 %	Outstanding gloss, low yellowing tendency

NECOWEL™ – 2 Component PU-coatings

Product	Type of oil	OH-content	Properties
NECOWEL™ 700	Polyester	5.5 %	Weather and high chemical resistance, very high gloss, no yellowing
NECOWEL™ 720	Polyester	6.5 %	Excellent hardness, very high weather and chemical resistance, high gloss, no yellowing
NECOWEL™ 750	Peanut oil	3.5 %	Weather and chemical resistance, very high gloss

ASK Chemicals GmbH

Reisholzstraße 16–18

40721 Hilden, Germany

Phone: +49 211 71 103-0

Fax: +49 211 71 103-35

specialties@ask-chemicals.com

www.specialties.ask-chemicals.com

Technical datasheets and guide formulations are provided on
our website www.specialties.ask-chemicals.com.

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