



# 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™

### 2 Component PU-coatings

Water-based 2 component PU-coatings tend to blister, if they are applied in high film thickness. The reason for this blistering is CO<sub>2</sub> forming 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 2 component PU-coatings depends on its cross linking density which is influenced by the OH-content of the polyol and the type of iso-

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

cyanate. NECOWEL™ 700 is a polyester polyol that offers high OH content for very high chemical resistance, for example to graphiti removers. As cross linking agent we suggest 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™ 750 | Peanut oil  | 3.5 %      | Weather and chemical resistance, very high gloss                    |
| NECOWEL™ 700 | Polyester   | 5.5 %      | Weather and high chemical resistance, very high gloss, no yellowing |

**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.ask-chemicals.com

Technical datasheets and guide formulations are  
provided on our website [www.ask-chemicals.com](http://www.ask-chemicals.com).

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