

Semkim Paint & Chemicals

SEMKIM was established in Istanbul in 1984 to serve coating industry as an Alkyd Resin producer. Later, in order to meet the dye chemical expectations of the customers, SEMKİM established a new factory in Kemalpaşa Industrial Zone, İZMİR and has been continuing its production in its new facility since 2003.

As being pioneer in Alkyd Resin production that stands for excellence, innovation, quality, reliability & internationalism, SEMKIM also provides the perfect range of customized chemical solutions such as varnishes for ink and paint.

As SEMKİM, our biggest goal is to be the best choice of the paint manufacturers around the world and, always prioritizes customer satisfaction by increasing service quality.

At the time being, SEMKIM export high quality resins to many continents including Europe, North Africa, Asia, Turkish Republics, South America.



Research and Development



SEMKIM always keeps customer expectations above all else.

To meet with customer demands, Our engineers put their Know-How experiences on every step of production using cutting edge Technologies in R&D labrotaries.

As to develope new and higher quality produts as per market demands, SEMKIM brings R&D units closer to business in order to fully understand our customers' needs as continues R&D investments in accordance with academical studies.





As indicated, alkyd resins are polyester-based materials that are normally modified with oil or fatty acids.

These products may be further modified with a variety of other chemical materials. Various polybasic acids, polyhydric alcohols, oils, fatty acids and modifying agents may be combined to produce alkyds with specifically designed properties.

The precise combination of the ingredients used, together with the careful control of the reaction, influences the final properties of the alkyd produced.

For this reason, many alkyds are available to the coating formulator. In considering the applications of alkyd resins, it is convenient to take them in order of decreasing oil length.



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Polyester Structure

The polyester component is responsible for physical (surface) drying and weather resistance (gloss retention, etc). The oil component is important for the flexibility of the films (internal plasticization) and all for the capability of oxidative crosslinking.

Classification of Alkyd Resins for Paints

The alkyd-based paints can be categorized on the volume percentage of oil which they contain:

SHORT OIL

The low concentration of oil paints (30-40%) are characterized by low drying times and are used especially in the production of paints for metal surfaces (for example in



the automotive industry) or in the production of plasticizer agents for the protection of external building structures

MEDIUM OIL

The medium oil content paints (45-55%) are the most versatile and they are widely used in the production of enamels both applicable by brush and airbrush

LONG OIL

The paints with long (55-70%) and very long (more than 70% of the total volume) oil content are characterized by a longer drying times compared to the previous categories, but are more resistant to aging and weathering. This type of paints is used mainly in the construction industry, in particular in the production of exterior paints and enamels, and in the production of products for the treatment of surfaces exposed to particularly arduous conditions, for example ships or boats of various materials.



Application Areas

Wood Coating

Alkyd resins are important ingredients in many synthetic paints, varnishes and enamels and find also applications as thermosetting plastics that can be molded. The principal applications are furniture and architectural coatings, product finishes, special-purpose coatings and automotive refinishing primers.

Alkyd-amino resin blends are probably the most important group of alkyd resins. Many industrial baking enamels, such as those for appliances, coil coatings, and automotive finishes, are based on alkyd-amino resin blends.

Chlorinated rubber is often used in combination with medium oil drying-type alkyds. The principal applications are highway traffic paints, concrete floor, and swimming pool paints. Applications of alkyd modified silicon resins include heat-resistant paints, and marine coatings and insulation varnishes.



Can Coating

Road Marking





RECOMENDED APPLICATIONS

- High viscosity alkyd resin provides excellent brush ability with film drying, good color retention, High Gloss and gloss retention, good film flexibility.
- All interior and exterior Decorative Paints, primers and undercoats



RECOMENDED APPLICATIONS

- Low viscosity alkyd resin provides excellent brush ability with good pigment wetting having good flow, High Gloss and gloss retention, good film flexibility.
- All interior and exterior Decorative Paints, primers and undercoats



RECOMENDED APPLICATIONS

- Medium viscosity soybean oil based alkyd resin provides excellent brush ability with film drying, good color retention and chemical resistance, good film flexibility.
- · All interior and exterior Decorative Paints, primers and undercoats



Solvent Type Oil Length -Oil Type -Commercial

: Soy Bean Oil : Fatty Acid TOFA: Tall Oil Fatty Acid CFA: Coconut Fatty Acid

TS: Soy Bean and Tung Oil DCO: Dehydrated Castor Oil Fatty Acid

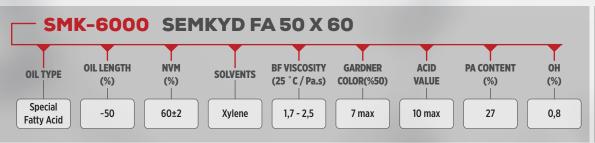
: Xylene W : White Spirit : Toluene BG

: Buthyl Glycol · D40

MODIFICATIONS : Polyurethane

UR : Urethane ST : Styrene AC : Acrylic

Medium Oil Alkyd Resin



RECOMENDED APPLICATIONS

- Anticorrosive paints
- Metal Surface
- · Industrial varnishes and paints



RECOMENDED APPLICATIONS

- · Anticorrosive paints
- Metal Surface
- · Industrial varnishes and paints



RECOMENDED APPLICATIONS

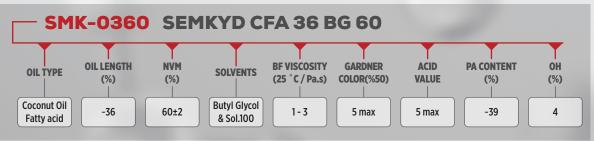
- Road Marking Paints
- Anticorrosive paints
- Metal Surface
- · Industrial varnishes and paints



RECOMENDED APPLICATIONS

- Road Marking Paints
- Industrial Finishes, Primers and Undercoats
- Wood and Metal Surface Coating

Short Oil Alkyd Resin



RECOMENDED APPLICATIONS

- In combination with Amino Resins for high reactive primers and Top Coats
- · Hammertone paints
- Laquers for Can Top Coating

SEMKYD CFA 34 X 60 PU

Modification
Solid Content
Solvent Type
Oil Length
Oil Type
Commercial

OIL TYPES

S : Soy Bean Oil
FA : Fatty Acid
TOFA: Tall Oil Fatty Acid
CFA : Coconut Fatty Acid

TS: Soy Bean and Tung Oil
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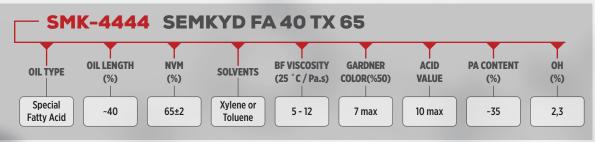
SOLVENTS

X : Xylene
W : White Spirit
T : Toluene
BG : Buthyl Glycol

MODIFICATIONS PU : Polyurethane UR : Urethane

ST : Styrene
AC : Acrylic





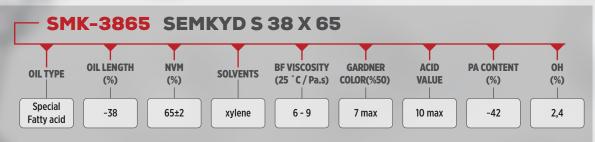
RECOMENDED APPLICATIONS

- Cellulosic Application
- · Stoving primer systems
- Wood varnishes with hardener as 2k resin
- · Top coat paints



RECOMENDED APPLICATIONS

- Cellulosic Application
- Stoving primer systems
- Wood varnishes with hardener as 2k resin
- Top coat paints



RECOMENDED APPLICATIONS

- Stoving primer systems
- Top coat paints
- Wood varnish
- Cellulosic application
- Paint & Polyurethane varnish

Fast Drying Short Oil Alkyd Resin





RECOMENDED APPLICATIONS

- Very fast drying, high quality industrial primer and paints
- Hammertone paints



RECOMENDED APPLICATIONS

- Very fast drying, high quality industrial primer and paints
- Hammertone paints

SEMKYD CFA 34 X 60 PU

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—Solvent Type
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SOLVENTS

X: Xylene
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T: Toluene
BG: Buthyl Glycol

D : D40

MODIFICATIONS

PU : Polyurethane UR : Urethane ST : Styrene AC : Acrylic

Fast Drying Short Oil Alkyd Resin

SMK-3349 SEMKYD FA 27 X 60 OIL LENGTH NVM **BF VISCOSITY GARDNER** ACID **PA CONTENT** OH OIL TYPE SOLVENTS (%) (%) (25 °C / Pa.s) COLOR(%50) **VALUE** (%) (%) Special ~27 60±2 Xylene 5 - 10 7 max 10 max ~34 1,8 Fatty Acid

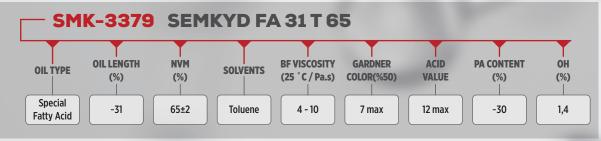
RECOMENDED APPLICATIONS

- · Very fast drying, high quality industrial primer and paints
- Hammertone paints
- Road Marking paints



RECOMENDED APPLICATIONS

- · Fast drying, high quality industrial primer and paints
- Hammertone paints



RECOMENDED APPLICATIONS

- Fast drying, high quality industrial primer and paints
- Hammertone paints



RECOMENDED APPLICATIONS

- Very fast drying industrial primers and paints,
- Matte semi gloss paints
- Road marking paints



RECOMENDED APPLICATIONS

- Very fast drying industrial primers and paints,
- Matte semi gloss paints
- Road marking paints

SEMKYD CFA 34 X 60 PU

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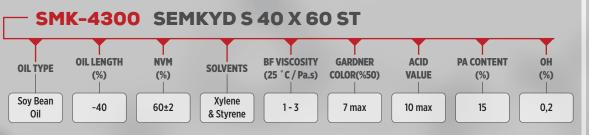
: Xylene W : White Spirit : Toluene BG : Buthyl Glycol

· D40

MODIFICATIONS : Polyurethane

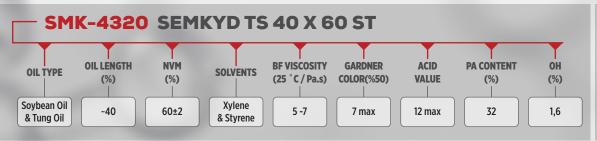
UR : Urethane ST : Styrene AC : Acrylic

Styrene Modified Alkyd Resin



RECOMENDED APPLICATIONS

- · Hammertone Paints and sprayable
- Very fast drying industrial paints



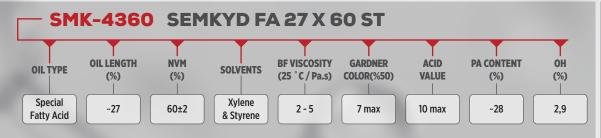
RECOMENDED APPLICATIONS

- Hammertone Paints
- Very fast drying industrial paints



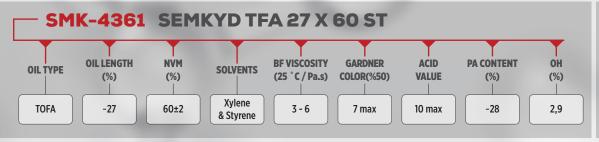
RECOMENDED APPLICATIONS

- Hammertone Paints
- Very fast drying industrial paints



RECOMENDED APPLICATIONS

- Top coats and hammer paints
- Very quick drying industrial primers



RECOMENDED APPLICATIONS

- Top coats and hammer paints
- Very quick drying industrial primers

SEMKYD CFA 34 X 60 PU

Modification Solid Content Solvent Type Oil Length -Oil Type -Commercial

OIL TYPES

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: Xylene W : White Spirit : Toluene BG : Buthyl Glycol

· D40

MODIFICATIONS

: Polyurethane UR : Urethane ST : Styrene AC : Acrylic

Urethane Modified Alkyd Resin



RECOMENDED APPLICATIONS

- Parquet Sealers
- Wood finishes
- Industrial and marine varnishes & paints



RECOMENDED APPLICATIONS

- Special yacht and parquet varnishes
- · Air drying wood applications
- Industrial and marine varnishes & paints



RECOMENDED APPLICATIONS

- Parquet Sealers
- Wood finishes
- Industrial and marine varnishes & paints





RECOMENDED APPLICATIONS

- Decorative primer and topcoat paints
- Wood paint and Varnishes
- Interior and exterior Top Coat Paints
- Suitable for Metal surfaces

SEMKYD CFA 34 X 60 PU

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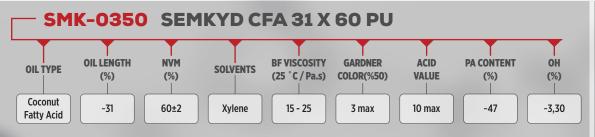
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MODIFICATIONSPU : Polyurethane

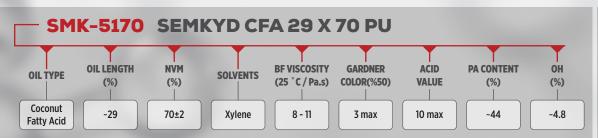
UR : Urethane
ST : Styrene
AC : Acrylic

Polyurethane Modified Alkyd Resin



RECOMENDED APPLICATIONS

- 2K PU systems
- Single Component Cellulosic systems
- Low temperature stoving systems

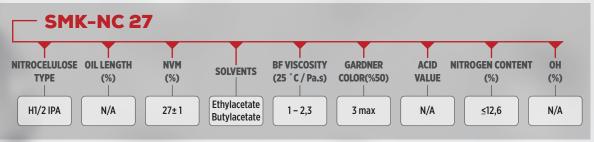


RECOMENDED APPLICATIONS

- Very high gloss top coat
- applications
- 2K PU systems
- Single Component Cellulosic systems
- Low temperature stoving systems

Nitrocellulose Varnish





RECOMENDED APPLICATIONS

- All cellulosic system in coating
- Wood paint and Varnishes
- Suitable for Metal surface
- Effect finish paints
- Leather and Nail laquers

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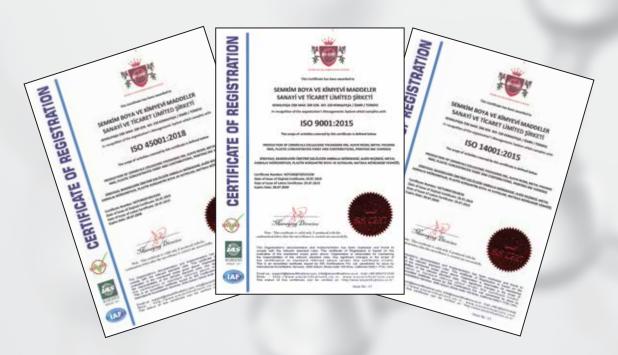
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SOLVENTS

X : Xylene W : White Spirit T : Toluene BG : Buthyl Glycol

MODIFICATIONSPU: Polyurethane

UR : Urethane ST : Styrene AC : Acrylic



MISSION & VISION

Vision;

Our purpose is to full fill customers need and expectations with dynamic improvements at high quality standards, keep our colleagues and employees happy while improving our business furthermore.

For that purpose our aim is to keep all our products on a quality level in line with the financial and technical demands of our customers. Quality System is the hallmark to improve ourselves.

It is under responsibility of all SEMKİM employees to maintain and improve customer based quality system. For that purpose our motto is continuous learning and continuous improvement.



Mission;

To apply highest quality standards
Achieved excellence innovative solutions
To improve supplier quality standards
Preserve resource to improve quality system

For different types of alkyd which are not in the with SEMKIM!	e list, please contact





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