

Solvent Based Resins Product Guide





Facts & Figures

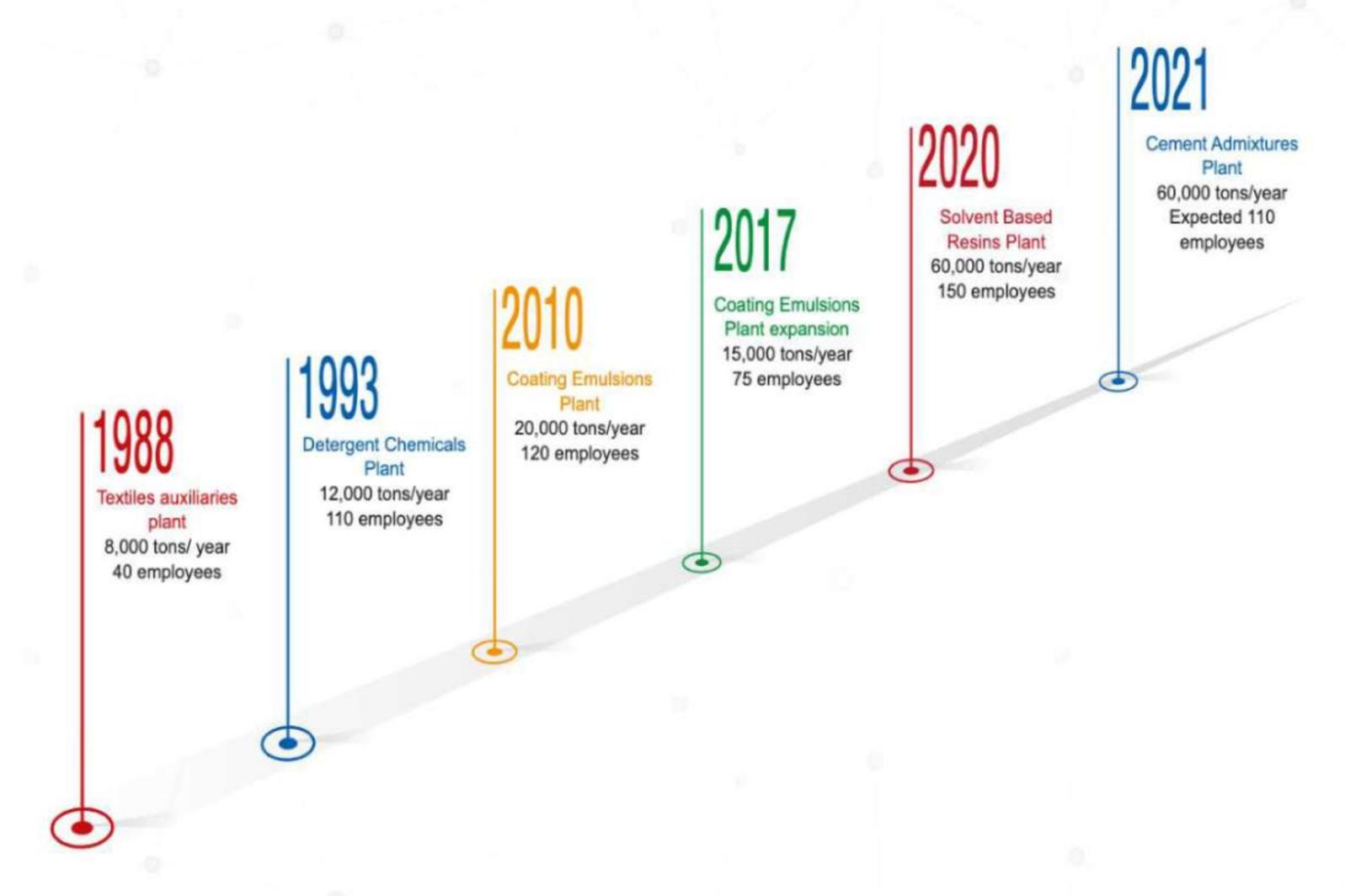
- Egyptian company with approximate \$100 million in sales & overall annual general production capacity of more than 175,000 MT.
- Diversified chemicals technology provider for coatings, composites, detergents, textiles, papers and ceramics.
- Approximate 750 employees & more than 1200 customer worldwide.

- 6 production facilities.
- 6 Research and application technology labs.
- Broad range of solutions for key coating segments: decorative, industrial, automotive, protective, inks, wood and specialty additives.

Egyptian British Co. - New concept in material solutions

As one of leading manufacturer of coatings raw materials, Egyptian British Co. offers an extensive range of innovative products and solutions for the coatings and adhesives industries.

At Egyptian British Co., we invest not only to address the key global challenges of population growth, climate change, digitalization and increasing mobility; but we invest to have a sustainable business that enables us to live up to our business purpose of "We grow together".



We are proud of over than 25 years of investment and growing up. But we are not defined by our past. Even with the experience behind us, Egyptian British Co. remains a young enterprise.

In a corporate world, we want to act in a curious, courageous, and colorful way trying out new things, questioning established ways, and pushing boundaries – for your benefit.

We offer a very wide choice of technologies to obtain the optimum performances from your formulations, ensuing our quality consistency through a well-equipped application lab that consists of the most recent instruments that increase our control on our products to ensure its consistency levels.



Vision

We see ourselves one of the main players in Egyptian, Middle East and African specialty chemicals market looking forward to being one of the most important players in the world, by maximizing our values that we provide to all associates, also by developing and strengthening our main strategic pillars.

Mission

To be one of the pioneers of specialty chemicals, chemical auxiliaries, resin and polyester manufacturers with our support of employees and their participation in decision making, which helps different manufacturers in different sectors such as coatings, composites, paper, detergent, ceramic, etc. to compete in Egypt, Africa, the Middle East and worldwide.

Strategy

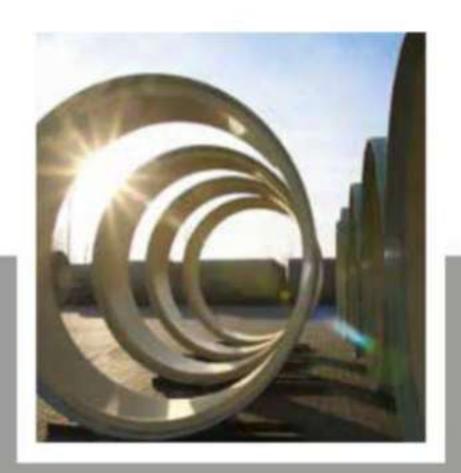
We adopt a strategy to provide more value by maximizing six strategic columns which are Invention, Quality, Service, Flexibility, Delivery, Competitive cost.

Egyptian British Co. - the respected concept in material solutions

Quality and sustainability of quality is one of the most important factors required in the present market, with the availability of ready to be delivered products in a short lead time and a reasonable price is our main business concept.

With Egyptian British Co., Our valuable partners will get rid of all quality inconsistency challenges and will be able to reduce the cost of their products, also they will find that we always work hard to get in a direct touch with our customer's voice, deeply understand and know their needs.

We have the ability to add a higher value to our product and our services as a deep realizing of our customers desires.







Diversified Chemicals Provider

Diversified chemicals solutions with expanded production capacities, we serve several industrial sectors, like coatings from most of types, composites, detergents, textiles, ceramics, papers and constructions.

Solvent Based Resins-Coatings & Composites

Covering most of needed resins in the field of car refinish, wood, decorative coatings, composites and adhesives

Moreover, we offer a potential range of solvent based additives like wax dispersion, alkyd emulsifier and alkyd driers.

Extra Entire Value Chain

We are enriching our entire value chain by massive tank farm capacity, well-equipped application, R&D, QC laboratories, diversified packing capabilities, enterprise resource planning system, ... etc.

All those items are in order to provide our esteemed clients a consistent level of service.



Business Expansion

It is difficult to get through a single day without coming in need for "well-pre-pared wood coating" raw materials with a consistent Quality and great appearance, thus Egyptian British Co. is investing to fulfill this message.

Especially in the binders manufacturing fields both water based, solvent based and other coating and composites additives.

Expanded Facilities

Recently, we had the expansion on levels of assets, capital, employments and innovation with this expansions, our employees work diligently every day to ensure that we are ready to meet your needs, exceed your expectations and deliver solutions for today's challenges and tomorrow's opportunities.

So you may only have contact with a few of our employees, taking into consideration that there are many qualified employees who are working to guarantee your success through R&D, technical service, marketing, sales, manufacturing, quality assurance, customer Service and more with only one message in subconscious that "Our Success is measures by your satisfaction".

Quality Comes First

Nowadays, the quality demands made on industrial processes are very high. This is equally true of the costcutting requirements.

However, both goals can be achieved by increasing the back-process efficiency, so that we worked at Egyptian British Co., to offer a wide range of solutions designed to enhance your process efficiency.

Optimum Performance

We offer a very wide choice of technologies to obtain the optimum performances from your formulations, ensuring our quality consistency through a well-equipped application lab that consists of the most recent instruments that increase our control on our products efficiency level.

We use our capabilities in order to create solutions that nourish, protect, and improve all performances and contribute to a more sustainable business. This is reflected in how we approach the resins business.

Brighter Future

Some companies see sustainability as a challenge, But at Egyptian British Co. For coating resins we see it as an opportunity, with endless possibilities to work together for a brighter future.

Our business is all about helping customers for easier life. At Egyptian British Co., we want to make life brighter for people, today and in coming generations.

By exchanging ideas and collaborating openly, we are making a difference, ensure profitability, and protect the planet.

Brighter Living

This means Brighter Living for everyone. Now you can rest your wine Glass on a beautifully lacquered coffee table without leaving a stain.

Or repair your old car converting it to "an amazing shaped refinished car" without the fear of any weathering, aging effect or yellowing appearance on its paint, that's the real beauty of Bright Science, brightening lives wherever and whenever it touches them.



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Families

| Product | Description | | | | | |
|-------------|-----------------------------------|--|--|--|--|--|
| Solvoya® L | Long oil alkyd resin | | | | | |
| Solvoya® M | Medium oil alkyd resin | | | | | |
| Solvoya® D | Air-dry short oil alkyd resin | | | | | |
| Solvoya® N | Air non-dry short oil alkyd resin | | | | | |
| Solvoya® UA | Urethanated alkyd resin | | | | | |
| Solvoya® UO | Urethanated oil resin | | | | | |
| Solvoya® CP | Copolymerized alkyd resin | | | | | |
| Solvoya® DB | Double boiled oil | | | | | |
| Solvoya® TH | Thixotropic alkyd resin | | | | | |

| Solvimor® U | Unsaturated polyester resin |
|--------------|-----------------------------|
| Solvimor® SP | Saturated polyester resin |
| Solvimor® AH | Polyol acrylic resin |
| Solvimor® AP | Thermoplastic acrylic resin |
| Solvimor® AT | Thermosetting acrylic resin |
| Solvimor® EP | Epoxy resin |
| Solvimor® AM | Amino resin |
| Solvimor® FP | Flexible packaging resin |

| Solvidur® AE | Alkyd emulsifier |
|--------------|------------------------------------|
| Solvidur® WD | Wax dispersion |
| Solvidur® AD | Alkyd driers |
| Solvidur® AL | Aliphatic polyisocyanate hardeners |
| Solvidur® AR | Aromatic polyisocyanate hardeners |

Product Grades

| Abbreviation | Description |
|--------------|---|
| L | Long alkyd grade |
| М | Medium alkyd grade |
| D | Short air dry alkyd grade |
| N | Short air non-dry alkyd grade |
| UA | Urethenated alkyd grade |
| UO | Urethenated oil grade |
| C | Copolymerized alkyd grade |
| DB | Doble boiled oil grade |
| TH | Thixotropic alkyd grade |
| U | Unsaturated polyester grade |
| U-BU | Buttons UPE-grade |
| U-BT | Bath tubs back-up UPE-grade |
| U-ISO | Iso phthalic UPE-grade |
| U-MF | Metal filler UPE-grade |
| U-MS | Marble surfacer UPE-grade |
| U-GP | General purpose UPE-grade |
| U-S | Wood sealer UPE-grade |
| U-LR | Roofing sheets UPE-grade |
| | |
| SP | Saturated polyester resin |
| Α | Acrylic grade |
| AH | Hydroxy (polyol) acrylic resin |
| AP | Thermoplastic acrylic resin |
| AT | Thermosetting acrylic resin |
| AT-A | Thermosetting acrylic acrylamide |
| AT-H | Thermosetting acrylic hydroxylated |
| FP | Flexible packaging resin |
| SB-A | Solvent base flexible packaging - hardner |
| SB-C | Solvent base flexible packaging - flaturer Solvent base flexible packaging - resin |
| SL-A | Solvent base flexible packaging - festil |
| SL-C | Solvent less flexible packaging - naruner Solvent less flexible packaging - resin |
| JL C | Solvent less nexible packaging - resin |
| DR | Alkyd driers |
| DR-Co | Alkyd driers - cobat octoate |
| DR-Zr | Alkyd driers - zirconium octoate |
| DR-Ca | Alkyd driers - calcium octoate |
| DR-Pb | Alkyd driers - lead octoate |
| DR-Mn | Alkyd driers - manganese octoate |
| | |

Solvent Types

| Abbreviation | Description |
|--------------|-------------------------------|
| В | Butanol |
| BA | Butyl acetate |
| EA | Ethyl acetate |
| MPA | Methoxy propyl Acetate |
| MP | Methoxy propanol |
| N | Solvent naphtha |
| Т | Toluene |
| W | White spirit |
| WK | Special grade of white spirit |
| Χ | Xylene |
| MS | Mixed solvent |
| NS | No solvent |
| ECO | Aromatic solvent free |

Co-reactant & Co-solvent

| Abbreviation | Description |
|--------------|-----------------|
| AC | Acrylics |
| R | Rosin |
| SM | Styrene monomer |
| VT | Vinyl toluene |

Physical specs testing notes

- (BF) viscosity: Iso 2555 at 25°C [mPa · s].
- Acid value [mgKOH/g].
- Brookfield viscosity is measured at the reduced form of the product.
- OH% based on material delivery form.

Solvoya® Liquid alkyd resins

Solvoya® group of products represents the top diversified excellent quality liquid alkyd resins including both long, medium, urethanated alkyds, urethanated oil, copolymerized alkyds, double boiled linseed oil and thixotropic alkyd resins.

We work smartly, hard with coating and industrial protecting surfaces manufacturers to find new ways to beautify and protect valuable pieces through the use of specialty resins for paint systems based on specialized resins, using our well-based assets.





High gloss chain stopped long alkyd resin

Definitely it is a challengeable needed balance to obtain both fast drying time with optimum gloss, we offer the suitable resin for that applications based on chain stopped long and medium oil alkyds.

Within 8 minutes only, you can get a dry film for high performance coatings with very fast drying time and satisfying gloss levels for varnishes and rest of coating types.

Short fast dry alkyd resins

With separate multiple choices, it helps finding the ideal product for the required performance, especially for applications that need a very fast drying time like top varnishes, road marking, etc.

Modified alkyds

Urethanated oils and alkyds are used as the sole binder where fast drying, hardness and abrasion resistance are required.

The urethanated oils and alkyds have the highest levels of modification and are especially designed for parquet flooring and heavy traffic areas with excellent chemical resistance.

Economic short resins

Egyptian British Co. is producing also the cost effective short alkyds under a very high performance levels to cover all market needs.





Low VOC range

We meet VOC global regulations by offering high solids alkyds and alkyds based on zero aromatic solvents, with same and higher performance on all fields

Thixotropic alkyd

We are pleased also to introduce our thixotropic resins for supply to the deco rative coatings market. During this time we have grown our expertise in this field and now offer an unrivalled range of products to meet your rheological needs, the benefits of thixotropic alkyds in coating formulations are pigment suspension, ease of application, non—drip application, reduced sagging, good leveling.

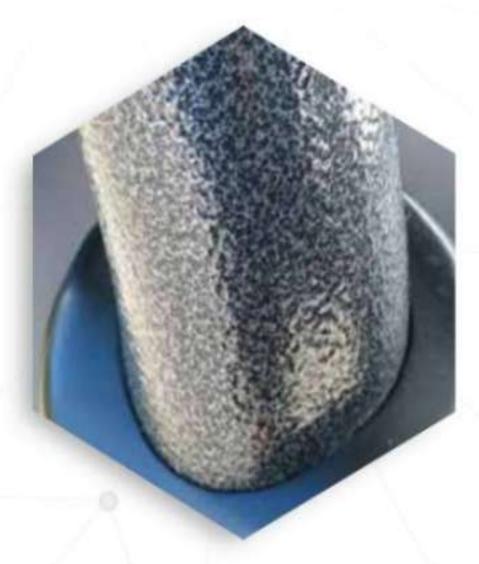
High viscosity, fast drying medium oil alkyd

Very fast drying time, good hardness & flexibility, good recoatability suitable for automotive refinish paints, machinery paints, drum paints and most of air dry applications.

Non-yellowing short alkyds

Based on synthetic and coconut fatty acids we offer excellent yellowing resistance, wetting properties, good color retention for NC-systems, cellulose nitrate finishes and high gloss, hardness, flexibility for PU-systems with good compatibility with polyol acrylics for automotive refinish.





Copolymerized Alkyds

Due to its very fast drying time, it is the ideal choice for many applications that requires short time to dry like top coats, primers, road marking. It is also possesses an amazing pattern for the hammer finish coatings due to its unique formulation.

Also now you can use it for aluminum metallic coatings without any coagulation hazards.

Solvoya^{*} L Liquid long oil alkyd resins

| Grade | Supply | Form | Compositi | on | | | | |
|-----------------------|-----------------------|----------------------------|--|-------|-----|----------------------|-------------------------------|--|
| Grade | Solids ±1% | Solvent type | Oil type | Oil % | PA% | Type of polyol | Approx Viscosity (Gardner) | |
| HIGH SOLI | OS - LONG OI | L ALKYDS | | | | | | |
| L1527-NS | 99 | No solvent | Soya oil F.A & Soya bean oil | 85 | 8 | Mixed polyols | Z1-Z3 at 100% | |
| L1125-NS | 99 | No solvent | Low rosin tall oil F.A. | 89 | 7 | Mixed polyols | Z-Z2 at 100% | |
| L1640-NS | 99 | No solvent | Low rosin tall oil F.A. & Dehydrated castor oil | 84 | 10 | Mixed polyols | Z2-Z4 at 100% | |
| L30170-NS | 99 | No solvent | Linseed oil | 70 | 20 | Pentaerythritol | Z6-Z7 at 100% | |
| L3215-NS | 99 | No solvent | Soya oil F.A & Soya bean oil | 68 | 20 | Pentaerythritol | W-Y at 100% | |
| L3605-W | 80 | White spirit | Soya oil F.A & Soya bean oil | 64 | 24 | Pentaerythritol | O-T at 70% & Z at 80% | |
| L3620-W | 80 | White spirit | Soya oil F.A & Soya bean oil | 64 | 30 | Mixed polyols | O-P at 60% & Y-Z at 70% | |
| AROMATIC | SOLVENT FRE | E - LONG OIL AL | KYDS 👠 | | | | | |
| L3250-ECO | 85 | Zero aromatic solvent | Soya oil F.A & Soya bean oil | 68 | 23 | Pentaerythritol | Z3-Z4 at 75% | |
| L3609-ECO | 80 | Zero aromatic solvent | Soya oil F.A & Soya bean oil | 64 | 25 | Mixed polyols | V at 70% | |
| L3665-ECO | 80 | Zero aromatic solvent | Soya oil F.A & Soya bean oil | 64 | 25 | Mixed polyols | Z4-Z5 at 70% | |
| CHAIN STO | PPED - LONG | OIL ALKYDS | | | | | | |
| L4530-W | 70 | White spirit | Soya oil F.A & Soya bean oil | 55 | 29 | Pentaerythritol | Z1-Z2 at 55% | |
| STANDARD | LONG OIL AL | .KYDS | | | | | | |
| L3422-W | 70 | White spirit | Linseed oil | 66 | 22 | Gly./Pentaerythritol | Z at 70% | |
| L4019-WK ¹ | 70 | White spirit | Linoleic rich fatty acid | 60 | 29 | Mixed polyols | Z8 at 70% & Y-Z at 55% | |
| L4046-WK | 70 | White spirit | Linoleic rich fatty acid | 60 | 29 | Mixed polyols | Z3-Z4 at 55% | |
| L3865-WK | 70 | White spirit | Soya oil F.A & Soya bean oil | 62 | 30 | Mixed polyols | Z4-Z5 at 70% | |
| L3919-WK | 70 | White spirit | Soya oil F.A & Soya bean oil | 61 | 28 | Pentaerythritol | Y-Z at 55% | |
| L3936-WK | 70 | White spirit | Soya oil F.A & Soya bean oil | 61 | 30 | Pentaerythritol | Z1-Z2 at 55% | |
| L3920-W ² | 70 | White spirit | Soya oil F.A & Soya bean oil | 61 | 28 | Pentaerythritol | Z8 at 70% & Y-Z at 55% | |
| L3922-W | 70 | White spirit | Soya oil F.A & Soya bean oil | 61 | 28 | Mixed polyols | Y-Z at 55% | |
| L3927-W | 70 | White spirit | Soya oil F.A & Soya bean oil | 61 | 28 | Mixed polyols | Z1-Z2 at 55% | |
| 1- Available in HS | version at 95% Solids | 2- Available in LV version | on visc. W-X at 55% | | | | | |

| Specifications | | | | | | | |
|-----------------------|--|---|---|--|--|--|--|
| Approx. BF. Viscosity | y Max. Acid Value Max. Color (Gardner) | | Characteristics and Main Applications | | | | |
| | | | | | | | |
| 2700 | 15 | 5 | Ultra-high solid, very good gloss and leveling properties for interior and exterior decorative paints. | | | | |
| 2500 | 15 | 5 | Very low viscosity, excellent gloss and good hardness for wood oil interior and exterior coatings, alkyd oils for flooring. | | | | |
| 4000 | 15 | 5 | Very low viscosity, excellent gloss for interior and wood tables. | | | | |
| 17000 | 15 | 5 | Excellent gloss, drying, flow and leveling properties, very good flexibility & good gloss retention for high quality printing inks and silk screen inks. | | | | |
| 1500 | 12 | 5 | Ultra-high solid content with very low viscosity, high gloss, very good leveling and brush-ability for interior & exterior decorative paints, varnish, very low viscosity paint & high gloss finishes. | | | | |
| 500 | 10 | 5 | High gloss & gloss retention, very low viscosity, very good wetting properties for | | | | |
| 2000 | 12 | 5 | very high gloss enamels, interior & exterior decorative paints, special for low VO paints, diluted with odorless kerosin. | | | | |
| | | | | | | | |
| 5000 | 10 | 5 | High gloss & gloss retention, very good wetting properties for very high gloss | | | | |
| 900 | 10 | 5 | enamels, interior & exterior decorative paints, special for low VOC paints, dilute with odorless kerosin. | | | | |
| 6500 | 10 | 5 | High gloss, good gloss retention, brush-ability and leveling properties, very goo flexibility, for high gloss paints and exterior house paints. | | | | |
| | | | | | | | |
| 3000 | 10 | 5 | Chain stopped, fast drying, good gloss and gloss retention, very good yellowin resistance & hardness for interior & exterior house paints, varnish and floosealers. | | | | |
| | | | | | | | |
| 2200 | 10 | 5 | Very good gloss, fast drying time, good weathering stability, very good adhesio properties for colored enamels and anti-corrosion primers for metals. | | | | |
| 1900 | 12 | 5 | | | | | |
| 4600 | 10 | 5 | | | | | |
| 6500 | 10 | 5 | Based on a special excellent quality of materials that provides good gloss, glos retention, hardness, excellent drying time for all types of decorative coatings an broad range of industrial coatings with high level of economical competition. | | | | |
| 1900 | 8 | 5 | bioda range of maastra coatings with ingiliterer of economical competition. | | | | |
| 3600 | 8 | 5 | | | | | |
| 2000 | 8 | 5 | | | | | |
| 2200 | 10 | 5 | Good gloss, gloss retention, good adhesion, brush-ability & leveling propertie good yellowing resistance & hardness for interior & exterior house paint varnish, floor sealers, porch and deck enamels. | | | | |
| 2700 | 10 | 5 | varitisti, noor sealers, porchi and deck enamels. | | | | |

Solvoya^{*} L Liquid long oil alkyd resins

| 1 | | Supply Form | | Composition | | | | |
|-------|----------------------|-------------|--------------|---------------------------------------|-------|-----|-----------------|---------------------------------------|
| Grade | Grade | Solids ±1% | Solvent type | Oil type | Oil % | PA% | Type of polyol | Approx Viscosity (Gardner) |
| 5 | STANDARD LO | NG OIL AL | .KYDS | | | | | |
| | L3504-W | 75 | White spirit | Soya oil F.A & Soya bean oil | 65 | 24 | Pentaerythritol | O-P at 60% Y-Z at 70% Z3 at 75% |
| ı | L3665-W | 70 | White spirit | Soya oil F.A & Soya bean oil | 64 | 25 | Mixed polyols | Z4-Z5 at 70% |
| ı | L3815-W ¹ | 70 | White spirit | Soya oil F.A & Soya bean oil | 62 | 28 | Mixed polyols | Z8 at 70% & Y-Z at 55% |
| | L3909-W | 70 | White spirit | Soya oil F.A & Soya bean oil | 61 | 28 | Pentaerythritol | Z6 at 70% & V-W at 55% |
| | L4036-W | 70 | White spirit | Soya oil F.A & Soya bean oil | 60 | 29 | Pentaerythritol | Z10 at 70% & Z2 at 55% |
| ı | L3740-W | 70 | White spirit | Safflower oil | 63 | 26 | Pentaerythritol | Z2-Z3 at 70% |
| | L3997-W ² | 70 | White spirit | Non- yellowing sun flower fatty acids | 61 | 25 | Pentaerythritol | Z5-Z6 at 70% |
| | L4299-W | 70 | White spirit | Low rosin tall oil F.A. | 58 | 23 | Pentaerythritol | Z5 at 70% |

¹⁻ Available in HV version, vis. Z3-Z4 at 55%

²⁻ Available in LV version, visc Z8 at 70% & Y-Z at 55%

| | Spe | ecifications | | Characteristics and Main Applications | | | | |
|---|-----------------------|-----------------|----------------------|--|--|--|--|--|
| 1 | Approx. BF. Viscosity | Max. Acid Value | Max. Color (Gardner) | Characteristics and Main Applications | | | | |
| | | | | | | | | |
| | 400 | 10 | 5 | Very low viscosity, good adhesion and hardness properties, light color, high gloss and gloss retention, brush-ability and leveling properties for interior & exterior house paints, gloss enamel, high build varnish & floor sealers. | | | | |
| | 6500 | 10 | 5 | High gloss, good gloss retention, brush-ability & leveling properties, very good flexibility for high gloss paints, exterior house paints. | | | | |
| | 1500 | 12 | 5 | Very good gloss & gloss retention, good exterior durability, very good color retention. | | | | |
| | 900 | 12 | 5 | Very good brush-ability and leveling properties, light color with good yellowing resistance, high gloss & gloss retention for interior & exterior house paints, non-yellowing medium viscosity paints, gloss enamel, varnish and floor sealers (with light color). | | | | |
| | 3600 | 8 | 5 | Very high viscosity, good adhesion & hardness, light color, high gloss and gloss retention for interior & exterior house paints, gloss enamel, high viscosity paints, varnish & floor sealers | | | | |
| | 4000 | 12 | 5 | Excellent yellowing resistance in the dark and light color, good brush-ability and leveling properties, light color with good color retention, high gloss & gloss | | | | |
| | 9700 | 8 | 5 | retention for interior non-yellowing paints, exterior high gloss paints, very special for white enamels. | | | | |
| | 9900 | 10 | 5 | Good brush-ability and leveling properties, excellent yellowing resistance, good weathering resistance, good gloss retention for decorative enamels and marine paints and super structure. | | | | |

Solvoya® M Liquid medium oil alkyd resins

Product Specifications

| | Supply | Form | Compositi | on | | | | |
|-----------------------------------|---------------------|------------------------------|------------------------------|----|---------|----------------------|-----------------------------|--|
| Grade | Solids ±1% | Solvent type | Oil type | | PA% | Type of polyol | Approx Viscosity | |
| AROMATIC SO | | E - MEDIUM OIL | | | 7.00307 | | (Gardner) | |
| M5046-ECO | 60 | Zero aromatic solvent | Soya oil F.A & Soya bean oil | 50 | 33 | Gly./Pentaerythritol | Z3-Z4 at 55% & Z6 at 60% | |
| CHAIN STOPPED - MEDIUM OIL ALKYDS | | | | | | | | |
| M52300-W | 75 | White spirit | Linoleic rich fatty acid | 48 | 20 | Mixed polyols | Z7-Z8 at 75% | |
| M5236-W | 55 | White spirit | Soya oil F.A & Soya bean oil | 48 | 27 | Pentaerythritol | Z2 at 55% | |
| M4730-MS ¹ | 55 | White spirit / xylene | Soya oil F.A & Soya bean oil | 53 | 26 | Mixed polyols | Z1 at 55% | |
| M5512-X | 60 | Xylene | Soya oil F.A & Soya bean oil | 45 | 36 | Pentaerythritol | V-X at 50% | |
| STANDARD MI | EDIUM OIL | ALKYDS | | | | | | |
| M4718-W | 55 | White spirit | Soya oil F.A & Soya bean oil | 53 | 35 | Glycerin | Y at 55% | |
| M5010-W | 50 | White spirit | Soya oil F.A & Soya bean oil | 50 | 37 | Gly./Pentaerythritol | V-W at 40% & Z6 at 50% | |
| M5046-W ² | 60 | White spirit | Soya oil F.A & Soya bean oil | 50 | 33 | Gly./Pentaerythritol | Z3-Z4 at 55% & Z6 at 60% | |
| M50148-W | 55 | White spirit | Soya oil F.A & Soya bean oil | 50 | 34 | Pentaerythritol | Z6 at 55% & X-Y at 45% | |
| M52100-W | 60 | White spirit | Soya oil F.A & Soya bean oil | 48 | 35 | Mixed polyols | Z5-Z6 at 50% | |
| M5090-W | 55 | White spirit | Soya oil F.A & Soya bean oil | 50 | 31 | pentaerythritol | Z5-Z6 at 55% | |
| M55148-W | 45 | White spirit | Soya oil F.A & Soya bean oil | 45 | 38 | Gly./Pentaerythritol | Z6 at 45% | |
| M5250-MS | 60 | White spirit / xylene | Soya oil F.A & Soya bean oil | 48 | 32 | Gly./Pentaerythritol | Z3-Z4 at 60% | |
| M5213-X | 70 | Xylene | Soya oil F.A & Soya bean oil | 48 | 34 | Glycerin | X-Y at 70% | |
| 1- Available at HV version | viscosity Z4 at 559 | % 2- Available in HV version | viscosity of Z5-Z6 at 55% | | | | | |

1- Available at HV version viscosity Z4 at 55% 2- Available in HV version viscosity of Z5-Z6 at 55%

| | !C! | | |
|-----------------------|---|---|---|
| | | | Characteristics and Main Applications |
| Approx. BF. Viscosity | Max. Acid Value | Max. Color (Gardner) | |
| | | | |
| 4600 | 10 | 5 | Good wetting properties, leveling properties, brush-ability, yellowing resistance and hardness, indicated for enamel base coats, non-yellowing air dry enamels for both decorative and industrial purposes, metal primers with fast dry properties and economic stoving enamels that cured at 140 - 160 °c. |
| | | | |
| 30000 | 12 | 5 | Very fast drying time, good hardness & flexibility, good recoat-ability suitable for automotive refinish paints, machinery paints, drum paints and most of air dry applications. |
| 3600 | 12 | 5 | Very fast drying time, good color and gloss retention, good yellowing and weathering resistance, very useful for high glossy industrial paints and decorative paints. |
| 3000 | 10 | 5 | Very good mechanical performance, good recoat-ability properties, for automotive, industrial, wood and decorative applications. |
| 1200 | 10 | 5 | Extremely fast drying, very good yellowing resistance and good gloss with excellent hardness and color retention. Indicated for automotive refinish, Industrial and drum coatings. |
| | | | |
| 1800 | 10 | 5 | Good drying time, excellent toughness, abrasion resistance, water resistance, suitable for base enamels, do it yourself paints, steel paints, primers and stoving enamels |
| 1000 | 10 | 5 | Good wetting properties, brush-ability, leveling, flexibility and gloss retention for non-yellowing coatings, economic industrial enamels, quick dry primers for both |
| 4600 | 10 | 5 | car refinish radiator and high gloss applications. |
| 14800 | 8 | 5 | High viscosity resin, very good yellowing resistance, brush-ability & leveling, very good flexibility & good gloss retention recommended for low cost industrial & |
| 10000 | 10 | 5 | architectural paints, non-yellowing air drying enamels, quick air drying metal primer & finishes and economical stoving enamel (temp 140 - 160 °C). |
| 9000 | 10 | 5 | Excellent gloss, weathering stability especially yellowing resistance, gloss and color retention, highly recommended for roller coating enamels and high quality decorative paints. |
| 14800 | 8 | 5 | Very good yellowing resistance, brush-ability & leveling, very good flexibility & good gloss retention recommended. for low cost industrial & architectural paints, non-yellowing air drying enamels, quick air drying metal primer & finishes and economical stoving enamel (temp 140 - 160 °C). |
| 5000 | 12 | 5 | Good gloss and gloss retention, yellowing resistance, fast drying time. For automotive refinishes, high quality industrial enamels and machinery coatings. |
| 1300 | 10 | 5 | Excellent durability, drying process, toughness & abrasion resistance and water resistance, suitable for enamel undercoat, do it yourself paints with good gloss, structural steel paints, quick air drying metal primers and stoving primers. |
| | Approx. BF. Viscosity 4600 30000 3600 3000 1200 1800 1800 1000 4600 14800 10000 9000 14800 | 4600 10 30000 12 3600 12 3000 10 1200 10 1800 10 1000 10 4600 10 14800 8 10000 10 9000 10 14800 8 5000 12 | Approx. BF. Viscosity Max. Acid Value Max. Color (Gardner) 4600 10 5 30000 12 5 3000 10 5 1200 10 5 1800 10 5 1800 10 5 1800 10 5 1000 10 5 14800 8 5 10000 10 5 14800 8 5 10000 10 5 14800 8 5 10000 10 5 |

Solvoya® D Liquid air dry short oil alkyd resins

Product Specifications

| Grade | S | upply Form | | | Com | position | |
|----------------------|------------|--------------------------|---------------------------------------|-------|-----|-----------------|-------------------------------|
| Grade | Solids ±1% | Solvent type | Oil type | Oil % | PA% | Type of polyol | Approx Viscosity (Gardner) |
| CHAIN STOPP | ED AIR DRY | Y - SHORT | OIL ALKYDS | | | | |
| D6518-X | 60 | Xylene | Soya oil F.A & Soya bean oil | 35 | 30 | Pentaerythritol | Y-Z at 50% |
| D6546-X ¹ | 60 | Xylene | Soya oil F.A & Soya bean oil | 35 | 30 | Pentaerythritol | Z3-Z4 at 60% |
| D7550-X | 60 | Xylene | Soya oil F.A & Soya bean oil | 25 | 30 | Mixed polyols | Z3-Z4 at 60% |
| D6098-MS | 55 | White spirit / Xylene | Non- yellowing sun flower fatty acids | 40 | 27 | Mixed polyols | Z5 at 55% |
| D6418-X | 50 | Xylene | Low rosin tall oil F.A. | 36 | 26 | Mixed polyols | Y-Z at 50% |
| D7027-X | 55 | Xylene | Vegetable fatty acids | 30 | 30 | Mixed polyols | Z-Z2 at 55% |
| D68145-X | 55 | Xylene | Linseed oil | 32 | 36 | Pentaerythritol | Z6 at 55% |
| STANDARD AI | R DRY - SH | ORT OIL A | LKYDS | | | | |
| D6123-X | 60 | Xylene | Dehydrated castor oil | 39 | 40 | Pentaerythritol | Z at 60% |
| D5936-X ² | 60 | Xylene | Soya oil F.A & Soya bean oil | 41 | 40 | Glycerin | Z2 at 60% |
| D6570-X | 70 | Xylene | Soya oil F.A & Soya bean oil | 35 | 30 | Mixed polyols | Z-Z2 at 60% |

Soya oil F.A & Soya bean oil

Soya oil F.A & Soya bean oil

40

42

41

36

Mixed polyols

Mixed polyols

Z4-Z6 at 60%

Z2-Z4 at 60%

70

60

Xylene

Xylene

D5970-X

D6446-X

¹⁻ Available in TFA version based on low rosin tall oil F.A 2- Available in HS version at 70% solids

| | | Specifications | | | | | | | | |
|--|--------------------------|----------------|-----------------|-------------------------|--|--|--|--|--|--|
| | Approx. BF. Viscosity | OH-Content (%) | Max. Acid Value | Max. Color (Gardner) | | | | | | |
| | | | | | | | | | | |
| | 1800 | 3.0 | 12 | 6 | Excellent salt spray resistance, very fast drying time, good corrosion resistance | | | | | |
| | 4600 | 3.0 | 10 | 6 | very good compatibility with chlorinated rubber for isolating varnishes and wire | | | | | |
| | 5000 | 3.0 | 12 | 6 | enamels, and it can be used to improve the drying time of NC and PU-systems. | | | | | |
| | 9800 | - | 10 | 6 | Compatible with aliphatic hydrocarbon solvents, very fast dry, very high weathering stability and yellowing resistance for industrial, wood and automotive coatings. | | | | | |
| | 1800 | 5.2 | 12 | 6 | Very good abrasion resistance, adhesion on metal substrates, gloss and color sta- bility, corrosion resistance, yellowing resistance and extreme fast dry for all types of wood, metal automotive and road marking paints. | | | | | |
| | 2700 | 3.0 | 12 | 6 | Excellent hardness, film leveling, sanding properties with fast solvent release properties for both 2K PU and NC-systems as matte varnishes and wood sealers | | | | | |
| | 14500 | 3.9 | 10 | 6 | Excellent salt spray resistance, extremely fast dry & through hardening, excellent gloss retention, very good adhesion and corrosion resistance for Primers, air drying & stoving finishes, excellent isolating varnish & wire enamels | | | | | |
| | | | | | | | | | | |
| | 2300 | | 15 | 5 | Good yellowing resistance, adhesion to metal substrate, color retention and gloss level used for enamels and low-bake enamels with non-yellowing properties for car refinishes. | | | | | |
| | 3600 | 2.9 | 12 | 5 | Good weathering durability, color retention, adhesion properties, excellent | | | | | |
| | 7000 | 2.9 | 12 | 6 | drying properties with tough film and abrasion resistance used for undercoat enamels, stoving enamels (100 °C - 140 °C) and other types of metal and steel | | | | | |
| | 7000 | 3.2 | 15 | 6 | paints. | | | | | |
| | 4600 | 4.3 | 10 | 3 | Good hardness and adhesion, Excellent gloss and color retention, Very good yellowing resistance. NC lacquer, Baking enamel, Gloss and semi-gloss PU for wood finishes Industrial paints. | | | | | |
| | | | | | | | | | | |

Solvoya® N Air non-dry short oil alkyd resins

| Crada | Suppl | y Form | | | | | | | |
|----------------------|------------|--------------|----------------------------------|-------|-----|-----------------|-------------------------------|--|--|
| Grade | Solids ±2% | Solvent type | Oil type | Oil % | PA% | Type of polyol | Approx Viscosity (Gardner) | | |
| N6532-X ¹ | 70 | Xylene | Coconut oil | 35 | 44 | Mixed polyols | Z2-Z4 at 60% | | |
| N6597-X ² | 70 | Xylene | Coconut oil | 35 | 44 | Mixed polyols | Z5 at 60% | | |
| N6836-X ³ | 70 | Xylene | Coconut fatty acids | 32 | 46 | Mixed polyols | Z2-Z3 at 60% | | |
| N6880-X ⁴ | 70 | Xylene | Coconut fatty acids | 32 | 46 | Mixed polyols | Z3-Z4 at 60% | | |
| N6897-X | 70 | Xylene | Coconut fatty acids | 32 | 46 | Mixed polyols | Z5-Z6 at 60% & Z10 at 70% | | |
| N7206-X | 70 | Xylene | Synthetic fatty acid | 28 | 42 | Mixed polyols | S-T at 60% | | |
| | | | | | | | | | |
| N7209-X | 70 | Xylene | Synthetic fatty acid | 28 | 40 | Mixed polyols | V-W at 60% | | |
| N5946-X | 60 | Xylene | Castor/ Linoleic rich fatty acid | 41 | 38 | Mixed polyols | Z2-Z4 at 60% | | |
| N7027-X | 55 | Xylene | Vegetable fatty acids | 30 | 32 | Pentaerythritol | Z-Z2 at 50% | | |

¹⁻ Available in in LS version at 60%

²⁻ Available in LS version at 60%

³⁻ Available in LS version at 60%

⁴⁻ Available in LS version at 60%

| | Specifications | | | Characteristics and Main Applications | | | | |
|--------------------------|----------------|-----------------|-------------------------|--|--|--|--|--|
| Approx. BF. Viscosity | OH-Content (%) | Max. Acid Value | Max. Color (Gardner) | Characteristics and Main Applications | | | | |
| 3200 | 3.2 | 8 | 12 | High hardness and flexibility and good outdoor durability and excellent yellowing and water resistance for NC-systems, stoving enamels for furniture and automotive refinishes, tinplate varnishes and for furniture lacquers. | | | | |
| 9700 | 4.0 | 8 | 3 | Excellent adhesion & good gloss, Good mechanical performance, High yellowing resistance, Good hardness & adhesion. Suitable for High quality NC lacquers for furniture & motor cars, Non-yellowing baking enamels. | | | | |
| 3600 | 4.0 | 8 | 3 | Ulab bandage and flouibility and good outdoor disability and assellant valleys | | | | |
| 8000 | 2.5 | 8 | 3 | High hardness and flexibility and good outdoor durability and excellent yellow- ing and water resistance for NC-systems, stoving enamels for furniture and auto- | | | | |
| 9700 | 3.2 | 8 | 6 | motive refinishes, tinplate varnishes and for 2K-PU furniture lacquers. | | | | |
| 600 | 3.0 | 10 | 3 | Very light color and very good compatibility with polyol acrylics for production of stoving, 2K-PU clear and pigmented enamels and acid curing paints. | | | | |
| 900 | 4.8 | 10 | 3 | Very good yellowing resistance and wetting properties, good color retention for NC-systems, cellulose nitrate finishes and high gloss, hardness, flexibility for PU-systems with good compatibility with polyol acrylics for automotive refinish systems, could be useful for oem enamels at 120 °C – 160 °C and acid curing finishes. | | | | |
| 4600 | 4.0 | 15 | 6 | Excellent elasticity, good solvent release and drying time, high wetting properties suitable for clear and pigmented PU-systems. | | | | |
| 2700 | 2.8 | 10 | 5 | Good hardness, film leveling, sanding properties, fast solvent release, suitable for 2K and NC systems for matte topcoats and sealers. | | | | |
| | | | | | | | | |

Solvoya® UA Liquid urethanated alkyd resins

Product Specifications

| Grado | Sup | oply Form | Composition | | | | | | |
|-------------|-------------|---------------|-------------|-------|-----|----------------|--------------------|--|--|
| Grade | Solids ±1% | Solvent type | Oil type | Oil % | PA% | Type of polyol | Type of Isocyanate | | |
| AROMATIC SO | OLVENT FREE | - URETHANATED | ALKYDS 👠 | | | | | | |

| UA3705-ECO | 60 | Zero aromatic solvent | Soya oil F.A & Soya bean oil | 63 | 28 | Pentaerythritol | Aromatic |
|------------|----|-----------------------|------------------------------|----|----|-----------------|----------|
| | | | | | | | |

STANDARD URETHANATED ALKYDS

| UA3503-W | 60 | White spirit | Soya oil F.A & Soya bean oil | 65 | 28 | Pentaerythritol | Aromatic | |
|----------|----|--------------|---|----|----|-----------------|-----------|--|
| UA3705-W | 55 | White spirit | Soya oil F.A & Soya bean oil | 63 | 28 | Pentaerythritol | Aromatic | |
| UA3720-W | 55 | White spirit | Soya oil F.A & Soya bean oil | 63 | 28 | Pentaerythritol | Aromatic | |
| UA3930-W | 55 | White spirit | Soya oil F.A & Soya bean oil | 61 | 28 | Pentaerythritol | Aromatic | |
| UA4046-W | 60 | White spirit | Soya oil F.A & Soya bean oil | 60 | 0 | Pentaerythritol | Aromatic | |
| UA4027-W | 60 | White spirit | Non-yellowing sun flower fatty acids | 60 | 28 | Pentaerythritol | Aliphatic | |
| UA4046-W | 60 | White spirit | Low rosin tall oil f. A. | 60 | 28 | Pentaerythritol | Aromatic | |
| UA4236-W | 55 | White spirit | Low rosin tall oil f. A. | 58 | 28 | Pentaerythritol | Aromatic | |
| | | | | | | | | |

Solvoya UO Liquid urethanated oil resins

| Grade | S | upply Form | Composition | | | | | | |
|-------------------------------------|------------|----------------|---|-------|-----|-----------------|-----------------------|--|--|
| Grade | Solids ±1% | Solvent type | Oil type | Oil % | PA% | Type of polyol | Type of Isocyanate | | |
| HIGH SOLIDS - URETHANATED OIL RESIN | | | | | | | | | |
| UO3520-W | 80 | White spirit | Soya oil F.A & Soya bean oil | 65 | 28 | Pentaerythritol | Aromatic | | |
| STANDARD - U | JRETHANA | TED OIL RESINS | | | | | | | |
| UO3820-W | 52 | White spirit | Linseed oil | 62 | 28 | Mixed polyols | Aromatic | | |
| UO3730-W ¹ | 60 | White spirit | Soya oil F.A & Soya bean oil | 63 | 28 | Pentaerythritol | Aromatic | | |
| UO3442-W | 60 | White spirit | Non-yellowing sun flower fatty acids | 66 | 28 | Pentaerythritol | Aromatic | | |

¹⁻ Available in HV version at viscosity Z6-Z7 at 60%

| | | Specification | ons | Characteristics and Marin Analisations |
|-------------------------------|-----------------------|-----------------|----------------------|--|
| Approx Viscosity (Gardner) | Approx. BF. Viscosity | Max. Acid Value | Max. Color (Gardner) | Characteristics and Main Applications |
| | | | | |
| S-T at 50% | 500 | 4 | 2 | Fast drying, high abrasion resistance, light color with good yellowing resistance, very good compatibility with the majority medium & long oil-air drying alkyds suitable for wood varnishes, pigmented decorative enamels for interior use only, furniture finishes, parquet sealers and yacht varnishes. |
| | | | | |
| L at 50% | 300 | 4 | 2 | Economical urethanated alkyd grade with good drying, good gloss, |
| S-T at 50% & Z3 at 55% | 500 | 4 | 2 | low viscosity range and very good abrasion resistance for general and furniturewood coatings. |
| Y-Z at 55% | 2000 | 4 | 2 | |
| Z-Z2 at 55% | 3000 | 4 | 5 | Fast drying time, good abrasion resistance, light color and yellowing resistance and excellent compatibility with all medium and long oil |
| Z3 at 60% | 4600 | 4 | 2 | alkyds. |
| Z1-Z2 at 60% | 2700 | 4 | 2 | Very light color, excellent weathering stability, yellowing resistance. |
| Z3 at 60% | 4600 | 4 | 2 | Fast drying, High abrasion resistance, Light color, suitable for wood coatings and water resistant paints. |
| Z2 at 55% | 3600 | 4 | 2 | Excellent yellowing resistance, weathering stability and fast drying time for all types of wood coatings and yacht coatings. |

| | | Specification | ons | Characteristics and Main Applications |
|-------------------------------|-----------------------|-----------------|----------------------|---|
| Approx Viscosity (Gardner) | Approx. BF. Viscosity | Max. Acid Value | Max. Color (Gardner) | Characteristics and Main Applications |
| | | | | |
| Y-Z at 80% | 2000 | 4 | 2 💿 | Very high solid content with low viscosity, excellent gloss and low VOC. |
| | | | | |
| Y-Z at 52% | 2000 | 4 | 2 | Good gloss retention, adhesion, water resistance, abrasion resistance and fast drying time. |
| Z2-Z3 at 60% | 3000 | 4 | 2 | High viscosity with light color, good adhesion and through hardening, |
| Z2-Z3 at 60% | 4200 | 4 | 2 | good chemical and water resistance, good gloss, abrasion resistance and fast drying time for all type of industrial paints. |

Solvoya° CP
Liquid copolymerized & modified resins

Product Specifications

| Cuada | S | upply Form | | (| omp | osition | |
|----------------------------|------------------------|----------------|------------------------------|-------|-----|--------------------|----------------------|
| Grade | Solids ±2% | Solvent type | Oil type | Oil % | PA% | Modification | Monomer content % |
| STYRENATED | COPOLYMI | ERIZED ALKYDS | | | | | |
| CP3504-WSM | 60 | White spirit | Linseed stand oil | 65 | 18 | Styrene monomer | 40 |
| CP7025-XSM | 60 | Xylene | Soya oil F.A & Soya bean oil | 30 | 20 | Styrene monomer | 40 |
| CP7046-XSM ¹ | 55 | Xylene | Soya oil F.A & Soya bean oil | 30 | 20 | Styrene monomer | 40 |
| CP6202-XSM | 50 | Xylene | Vegetable fatty acids | 38 | 12 | Styrene monomer | 40 |
| ACRYLIC COP | OLYMERIZE | ED ALKYDS | | | | | |
| CP7109-XAC | 60 | Xylene | Soya oil F.A & Soya bean oil | 29 | 18 | Acrylics | 40 |
| VINYL-TOLUE | NE COPOLY | MERIZED ALKYD | S | | | | |
| CP6909-WVT | 70 | White spirit | Low rosin tall oil F.A | 31 | 18 | Vinyl toluene | 41 |
| 1- Available in HV version | n at visc. of Z6-Z8 at | t 55%, 35000cp | | | | | |

Supply Form

| Grade | | | | | | | |
|--------------|------------|----------------|----------------------|-------|-----|-----------------|-----------------|
| Grade | Solids ±2% | Solvent type | Oil type | Oil % | PA% | Modification | Type of polyol |
| ROSIN AND PH | HENOLIC N | ODIFIED RESINS | | | | | |
| CP5607-WR | 50 | White spirit | Linseed oil | 44 | 33 | Rosin | Pentaerythritol |
| CP6680-XR | 60 | Xylene | Linseed oil/Tung oil | 34 | 37 | Phenolic/ Rosin | Pentaerythritol |

Composition

| | | Specific | cations | | | |
|----------------|-------------------------------|-----------------------|-------------------------|----------------------|--|--|
| Type of polyol | Approx Viscosity (Gardner) | Approx. BF. Viscosity | Max. Color (Gardner) | Max. Color (Gardner) | Characteristics and Main Applications | |
| | | | | | | |
| Mixed polyols | N at 60% | 400 | 5 | 10 | Excellent brush-ability & good leafing alumi- num effect (Hazy) for aluminum & bronze paints for industrial applications. | |
| Mixed polyols | Y-Z1 at 60% | 2500 | 10 | 5 | Very short drying time, low viscosity, good filling | |
| Glycerin | Z2-Z3 at 55% | 4600 | 10 | 5 | properties for hammer finishes, industrial enam- els, fast drying applications. | |
| Glycerin | F-L at 50% | 200 | 12 | 5 | Very short drying time, Good filling properties good recoat ability, Hammer finishes, Industria spraying enamels, Fast drying primers & var nishes. | |
| | | | | | | |
| Glycerin | V at 60% | 900 | 5 | 10 | Very short drying time, very good hardness, gloss, wettability and adhesion on tinplates/aluminum for can coating and collapsible tube lacquers, roller and toy enamels. | |
| | | | | | | |
| Mixed polyols | Z6 at 70% & V at 50% | 900 | 12 | 5 | Very short drying time, Very good hardness & gloss, Yellowing resistance Hammer finishes, Industrial top coat paints, Anti corrosive primers | |

| | | Specification | ons | Characteristics and Main Applications | |
|---|------|-----------------|----------------------|--|--|
| Approx Viscosity (Gardner) Approx. BF. Viscosity | | Max. Acid Value | Max. Color (Gardner) | Characteristics and Main Applications | |
| | | | | | |
| T-V at 50% | 700 | 15 | 16 | Excellent hardness, drying time, gloss and gloss retention for high hardness furniture and industrial coating systems. | |
| Z4-Z5 at 60% | 8000 | 20 | 9 | Fast drying time, good adhesion, corrosion resistance and water resistance, for air drying primers and fillers, one coat system for metal. | |

Solvoya DB Double boiled oil

Product Specifications

| | Grade | Sup | oply Form | orm Composition | | | | Specifications | |
|--------------|-------|------------|--------------|-----------------|-------|-------------------------------|-----------------------|----------------|--|
| | Grade | Solids ±1% | Solvent type | Oil type | Oil % | Approx Viscosity (Gardner) | Approx. BF. Viscosity | | |
| DB0360-NS 10 | | 100 | No solvent | Linseed oil | 100 | Z2-Z3 at 100% | 3600 | | |

Solvoya° TH Thixotropic alkyd resins

| ı | | C | upply Form | Compac | ition | | Specifications | | |
|---|----------|-------------|--------------|------------------------------|-------|-----|---------------------|-----------------|--|
| П | Grade | Supply Form | | Composition | | | Specifications | | |
| П | | Solids ±1% | Solvent type | Oil type | Oil % | PA% | Viscosity (Gardner) | Max. Acid Value | |
| | TH4603-W | 50 | White spirit | Soya oil F.A & soya bean oil | 54 | 18 | pentaerythritol | 12 | |
| | TH4805-W | 55 | White spirit | Soya oil F.A & soya bean oil | 52 | 18 | pentaerythritol | 12 | |

| Max. Acid Value | Max. Color (Ga | rdner) | Characteristics and Main Applications |
|-----------------|----------------|--------|---|
| 15 | 13 | | Good drying time, gloss retention and pigment wetting properties with excellent brush-ability and leveling, suitable for adjusting the required drying time especially for putties. |

| | | | Characteristics and Main Applications |
|--|-------------------------|--------------|--|
| | Max. Color (Gardner) | Gel Strength | Characteristics and Main Applications |
| | 8 | 200-400 | Vanakinkasia saita saita saita khinakasai saffa da sidhasan lasa sanaina asasallasakkasakin anad lasalina affa d |
| | 8 | 400-600 | Very high viscosity with thixotropic effect with very low sagging, excellent brushing and leveling effect. |

Solvimor ®

Polyester, acrylic, amino, epoxy and flexible packaging resins

Solvimor ® represents UPR, saturated polyester resins, acrylic resins, flexible packaging resins, amino and epoxy resins.

Egyptian British Co. offers these grades in an optimum quality with a high consistent level of quality that covers lots of applications like fiber glass reinforced most of automotive refinishing coating systems, wood, metal, can aerosol paint and flexible packaging applications.





Wood sealer and metal fillers

Egyptian British Co. is providing a wide range of UPR products that shows excellent performance on the level of hardness, flexibility, sandability with a non- greening effect.

To ensure a very easy and fast application during day and night.

Solvent based and solvent free flexible packaging

For both medium to high performance and general purpose adhesive, suitable for the lamination of aluminum containing structures and films such as PE, OPP, CPP, PA, PET with and without sandwich printing.





Automotive refinish systems

We offer diversified types of resins suitable for automotive refinishing systems, such as metal putty, primer, surfacer, metallic base coat, top coat and solid color systems with excellent parameters that provides an excellent compatibility with CAB and other alkyd resins.

With Egyptian British Co. well-established manufacturing systems, you become able to design the desired car refinish system with wide range of coating specifications that give you the system flexible room to move between performance levels and economic levels.

Bath tubs back-up UPE

We offer the ideal formula for bath tubs back-up reinforcing processes with excellent adhesion power, shrinkage resistance and excellent filler wettability without sagging hazards.

GRP/FRP pipes industry

With a 100% Iso-Phthalic base UPE and with very special formula, it is available for GRP/FRP pipe industry with very high acid resistance.





Can & coil coatings

With both resin systems, it is available for very good flexibility hardness, adhesion power and sterilization resistance.

Aerosol paint

Egyptian British Co. is offering the ideal product range for excellent dispersion ability, wettability and new low acid values for multipurposes aerosol paints, all plus LPG excellent compatibility

Solvimor® U Unsaturated polyester resins

| ı | | | | | | | | |
|---|-------------|------------|-----------------|-------------------|-----------------|--------------------|----------------------------|--|
| | Cuada | | | Supply | Form | | | |
| | Grade | Solids ±2% | Solvent type | Gel time (min) | Cure Time (min) | Peak Exotherm (°C) | Approx Viscosity (Gardner) | |
| | ISOPHTHALIC | UNSATUR | ATED POLYES | TER RES | SINS | | | |
| | U-ISO2500 | 60 | Styrene monomer | 10-12 | 18-22 | 180±5 | O-T | |
| | U-ISO2000 | 60 | Styrene monomer | 10-12 | 18-22 | 190±20 | L-P | |
| ı | AMINE ACCEL | ERATED U | NSATURATED | POLYES | STER RESINS | | | |
| | U-MF0468 | 68 | Styrene monomer | 3-6 | 11-15 | 110±10 | N-Q | |
| ı | U-MF0465 | 65 | Styrene monomer | 5-8 | 14-18 | 170±10 | N-P | |
| | U-MF0362 | 62 | Styrene monomer | 4-8 | 14-18 | 120±10 | L-Q | |
| | U-MS0770 | 70 | Styrene monomer | 5-7 | 12-16 | 170±10 | U-V | |
| | U-MS2070 | 70 | Styrene monomer | 9-12 | 12-16 | 125±11 | Y-Z | |
| ľ | THIXOTROPIC | UNSATUR | ATED POLYES | TER RES | SINS | | | |
| | U-BT0258 | 58 | Styrene monomer | 10-20 | 25-40 | 190±10 | - | |
| ١ | U-BT0358 | 58 | Styrene monomer | 15-20 | 25-35 | 190±10 | 9 | |
| ŀ | STANDARD UN | NSATURAT | ED POLYESTE | R RESIN | IS | | | |
| | U-S2575 | 75 | Styrene monomer | 3-6 | 8-12 | 150±10 | Y-Z | |
| | U-S2375 | 75 | Styrene monomer | 3-6 | 8-12 | 160±10 | Y-Z | |
| | U-S1675 | 75 | Styrene monomer | 8-12 | 15-22 | 160±10 | X-Y | |
| | U-GP2000 | 62 | Styrene monomer | 10-20 | 20-40 | 160±20 | G-K | |
| | U-GP0461 | 61 | Styrene monomer | 8-14 | 16-25 | 125±10 | N-Q | |
| | U-GP0265 | 65 | Styrene monomer | 5-10 | 20-10 | 190±20 | G-J | |
| | U-GP0365 | 65 | Styrene monomer | 8-12 | 18-25 | 150±20 | L-M | |
| | U-LR0465 | 65 | Styrene monomer | 10-15 | 20-25 | 125±10 | J-L | |
| | U-BU2070 | 70 | Styrene monomer | 5-12 | 10-20 | 160±20 | Y-Z1 | |
| | U-BU1870 | 72 | Styrene monomer | 5-10 | 15-25 | 160±20 | Y-Z | |
| | | | | | | | | |

| Specification | S | | Characteristics and Main Applications |
|-----------------------|-----------------|------------|---|
| Approx. BF. Viscosity | Max. Acid Value | Max. Color | Characteristics and Main Applications |
| | | | |
| 400 - 600 | 15 | 5 [G] | UPR based on isophthalic in styrene monomer, suitable for glass fiber laminates for general purpose applications such as pipes industry based on FRP. Its good chemical resistance makes the |
| 300 - 400 | 15 | 5 [G] | resin suitable for manufacture of tanks and containers for fuels. |
| | | | |
| 300 - 500 | 18 | 8 [G] | Medium flexibility, medium reactivity, excellent dry sandability & do not rapidly clog sanding paper. It is ideal as sole highly filled binder for car body filler, accepts higher filler loads & show |
| 360 - 380 | 18 | 8 [G] | excellent storage stability of derived pastes. |
| 300-400 | 25 | 8 [G] | Excellent sandability, good curing properties, Wax free, amine accelerated unsaturated polyester, Standard body putty (filler) compounds, light weight body putty (filler) compounds, putties based on it achieve excellent dry sand ability & do not rapidly clog sanding paper. |
| 600 - 800 | 40 | 8 [G] | High rigidity, high reactivity and medium viscosity suitable as marble stopper, adhesive and |
| 1900 - 2500 | 30 | 8 [G] | binder for highly filled knifing fillers. |
| | | | |
| 120-180 | 40 | Hazy-pink | General purposes UPR recommended for high filled applications like bath tubs, telephone booths, kiosks, non-structural cladding etc. Glass fiber laminates for general purpose applica- |
| 250-350 | 20 | Hazy-pink | tions, gel-coat for sanitary ware, spray applications. |
| | | | |
| 2500 | 20 | 3 [G] | Rigid films, good sanding properties, rapid curing, fast dry film and low odor emissions and low greening effect. It is recommended for wood finish varnish, sanding wood sealers where rapid |
| 2300 | 25 | 3 [G] | and easy sanding characteristics are required. |
| 1600 | 25 | 5 [G] | Excellent wettability properties for rigid films, good curing properties, wax free, Good sanding properties and Low odor emissions and low greening effect. recommended for good wood finish varnish and wood sanding sealers. |
| 300-400 | 20 | 5 [G] | Ortho-phthalic based UPE with excellent mechanical properties, recommended for the file- ment winding and GRP pipes hand lay up process. |
| 350-450 | 20 | 3 [G] | High chemical resistance, rigid films, good curing properties, wax free, Non accelerated UPR for general purpose applications where economy in use is a major consideration and both hydro- |
| 150-250 | 30 | Hazy | lytic stability and structural performance are not critical. It may be used in all general FRP applications. |
| 300-400 | 20 | 5 [G] | high filler capacity, high reactivity, rigid films accompanied with good hardness, shrinkage rate, recommended for casting applications, concrete & artificial marble industry. |
| 350-450 | 40 | 1 [G] | Very high clarity with a very low refractive index, ideal for roofing sheets. |
| 1900 - 2600 | 40 | 150 [H] | Excellent pigment wettability, good transparency UPR for manufacture of buttons by centrifu- |
| 1700 - 2000 | 40 | 150 [H] | gation and casting rods procedures. |

Solvimor® SP Liquid saturated polyester resins

| Crada | | Supply Form | | |
|-----------|------------|--|-------------------------------|-----------------------|
| Grade | Solids ±2% | Solvent type | Approx Viscosity (Gardner) | Approx. BF. Viscosity |
| SP8060-N | 60 | Solvent naphtha 150ND | Z4-Z5 at 60% | 8000 |
| SP3075-X | 75 | Xylene | Z1-Z3 at 75% | 3000 |
| SP0660-MS | 60 | Solvesso100/ Methoxy propanol/ xylene | S –U at 60% | 600 |
| SP0550-MS | 50 | Solvesso100/ Methoxy propanol/ xylene | S –U at 50% | 500 |
| SP3063-MS | 63 | Solvent naphtha150ND/ butyl glycol | Z1-Z2 at 63% | 3000 |
| SP3365-MS | 65 | Solvent naphtha 150ND/butyl glycol 4/1 | Z1-Z2 at 65% | 3300 |
| SP2550-MS | 50 | Solvent naphtha 150ND/butyl glycol; 4/1 | Y-Z at 50% | 2500 |
| SP4050-MS | 55 | Diactone alcohol/ Solvent naphtha 150ND , 7/3 | Z2-Z3 at 55% | 4000 |
| SP4255-N | 55 | Solvent naphtha 150ND | Z2-Z3 at 55% | 4200 |
| SP5550-MS | 50 | Solvent naphtha 150ND/ Isophorone 3/1 | Z3-Z4 at 50% | 5500 |
| SP3360-MS | 60 | Solvent naphtha 150ND/ butyl glycol 3/1 | Z1-Z2 at 60% | 3300 |
| SP6560-MS | 60 | Solvent naphtha 150ND/ Solvent Naphtha 200ND;1/1 | Z4 at 60% | 6500 |
| SP5050-MS | 50 | Solvent naphtha 150ND/ Solvent naphtha 200ND/ Dowanol PM;32/10/8 | Z3-Z4 at 50% | 5000 |

| Specifications | | | | | Characteristics and Main Applications | |
|----------------|---------|-----------------|----------------------|------------|---|--|
| OH-Cont | ent (%) | Max. Acid Value | Max. Color (Gardner) | Appearance | Characteristics and Main Applications | |
| 1.0 |) | 10 | 2 | Clear | Very Good Flexibility, deep drawn, cold crush tube coatings and white base coats. | |
| 3.2 | 2 | 10 | 5 | Clear | Suitable for formulation of air-drying two-pack as a co-reactant for polyisocyanates coatings and clear & pigmented finishes for wood with good mechanical properties & gloss and excellent flow and leveling properties. | |
| 2.5 | 5 | 10 | 4 | Clear | With excellent CAB and MF compatibility for automotive base coats and automotive solid color systems. | |
| 2.5 | 5 | | 4 | Clear | Automotive refinish base coat systems based on high solids and industrial stoving system characterized by excellent sagging resistance and good flow and drying properties. | |
| 3.0 |) | 10 | 3 | Clear | Recommended for top coats for interior, exterior and general industri- al stoving enamels for coil and can coatings with good outdoor dura- | |
| 2.5 | i | 8 | 3 | Clear | bility, high flexibility and good adhesion properties. | |
| 1.2 | 2 | 5 | 3 | Clear | Suitable resin for production of white base coat and over-print varnishes for can and coil coatings with good hardness, good flexibility, good | |
| 1.2 | 2 | 5 | 3 | Clear | sterilization resistance and excellent reactivity & outdoor durability. | |
| 8.0 | 3 | 5 | 3 | Clear | Used for coil and domestic appliances enamels, also for general purpose, twist off closures can coatings. | |
| 0.3 | 3 | 10 | 5 | Clear | Recommended for production of enamels for Aerosol and collapsible tubes and can coatings with excellent reactivity, adhesion power to aluminum, flexibility properties, and excellent sterilization resistance. | |
| 1.5 | ; | 8 | 3 | Clear | Offering excellent sterilization resistance and leveling for manufactur- ing of can coating white base coats. | |
| 0.7 | 7 | 5 | 5 | Clear | Good flexibility and adhesion to HDG (hot dipped galvanized steel) and aluminum, ideal for manufacturing of can coating primers and top coats. | |
| 0.3 | 3 | 10 | 5 | Clear | Good reactivity and adhesion to aluminum, sterilization resistance and good flexibility for can coating, especially for Aerosol cans and collapsible tube coatings. | |
| | | | | | | |

Solvimor® AH Liquid Polyol acrylic resins

| Crado | Grade | | ly Form | |
|-----------------------|----------------|------------|------------------------------------|----------------------------|
| Grade | OH-Content (%) | Solids ±2% | Solvent type | Approx Viscosity (Gardner) |
| LOW SOLIDS - | ACRYLIC PO | DLYOL | | |
| H18060-X | 1.0 | 60 | Xylene | Z6 - Z7 at 60% |
| H2055-X | 1.8 | 55 | Xylene | X - Z at 55% |
| H4560-MS | 1.8 | 60 | Xylene/ MPA | Z2 - Z4 at 60% |
| H4550-BA ¹ | 2.0 | 50 | Butyl acetate | Z2 - Z4 at 50% |
| H4550-MS | 2.0 | 50 | Xylene/ Butyl acetate | Z2 - Z4 at 50% |
| H2860-X | 2.0 | 60 | Xylene | X - Z at 60% |
| H3560-X | 2.7 | 60 | Xylene | Z1 - Z2 at 60% |
| H14060-X | 2.8 | 60 | Xylene | Z5 – Z6 at 60% |
| H2065-BA | 3.0 | 65 | Butyl acetate | X - Z at 65% |
| H1860-BA | 3.0 | 60 | Butyl acetate | X – Z at 60% |
| H1550-X | 4.0 | 50 | Xylene | W-Y at 50% |
| H3565-BA | 4.2 | 65 | Butyl acetate | Z - Z3 at 65% |
| H4065-X | 4.2 | 65 | Xylene | Z – Z3 at 65% |
| H4060-MS | 4.2 | 60 | Xylene/ MPA | Z1 - Z3 at 60% |
| H2760-MS | 4.5 | 60 | Mixed solvents | Z - Z1 at 60% |
| H3060-MS | 4.5 | 60 | Xylene/ Butyl acetate/ Naphtha 100 | Z - Z2 at 60% |
| MEDIUM SOLI | DS - ACRYLI | C POLYOL | | |
| H3070-BA | 3.0 | 70 | Butyl acetate | Z-Z2 at 70% |
| H10070-MS | 3.0 | 70 | Xylene/ Butyl acetate | Z4-Z6 at 70% |
| H4070-BA | 4.2 | 70 | Butyl acetate | Z1 – Z3 at 70% |
| H10070-BA | 4.2 | 70 | Butyl acetate | Z4 – Z6 at 70% |
| H9570-BA | 4.5 | 70 | Butyl acetate | Z4 - Z6 at 70% |
| H4570-BA | 4.5 | 70 | Butyl acetate | Z2 – Z3 at 70% |
| H7070-BA | 4.5 | 70 | Butyl acetate | Z3-Z5 at 70% |

| Specific | cations | | Characteristics and Main Applications | |
|-----------------------|-----------------|--------------------|--|--|
| Approx. BF. Viscosity | Max. Acid Value | Max. Color (Hazen) | | |
| | | | | |
| 18000 | 5-10 | 50 | Very fast drying time with short time for sanding, excellent adhesion and mechanical properties for automotive refinish primers, clear coat and general industrial coatings | |
| 2000 | 5-10 | 50 | Early sandability, excellent adhesion, mechanical properties, recommended for coseffective 2K general purposes paints. | |
| 4500 | 5-10 | 50 | Good drying time, appearance, flexibility, adhesion and mechanical properties, recommended for 2K car refinish systems, machine and protective paints. | |
| 4500 | 5-10 | 50 | Excellent adhesion on plastic substrates, mechanical, weathering resistance, with ex- | |
| 4500 | 5-10 | 50 | cellent compatibility with CAB for 1K metallic base coat and 2K high quality coa | |
| 2000 | 5-10 | 50 | Good mechanical and adhesion properties for 2K car refinish and machine systems. | |
| 3500 | 5-10 | 50 | Good gloss, adhesion and mechanical properties, recommended for pigmented an clear car refinish systems and general applications. | |
| 14000 | 5 -10 | 50 | High viscous resin with high gloss for 2K primers, pigmented and clear car refinish sy tems with excellent mechanical properties. | |
| 2000 | 5-10 | 50 | Suitable for automotive refinish clear coat and solid color systems and top coat for in dustrial purposes with good appearance, mechanical properties and weathering re sistance. | |
| 1800 | 5 -10 | 50 | Excellent gloss, mechanical properties, out-door stability and chemical resistance for car refinsih systems including all applications (primers, pigmented and clear coat and off-shores and cranes paints. | |
| 1500 | 4-12 | 50 | Excellent gloss, mechanical, exterior durability for premium quality low soilds 2K-cand pigmented top coats for automotive refinishs. | |
| 3500 | 5-10 | 50 | Eventions doi: outgries durability, machanical and chemical registance recommended | |
| 4000 | 5 -10 | 50 | Excellent doi, exterior durability, mechanical and chemical resistance recommender for clear coats, solid color top-coat for automotive refinishes, agricultural, marine, protective and construction coatings. | |
| 4000 | 6-10 | 50 | | |
| 2700 | 5 -10 | 50 | High gloss ,excellent mechanical properties, outdoor stability and chemical resistance | |
| 3000 | 4-10 | 100 | recommended for 2K-systems. | |
| | | | | |
| 3000 | 5 -10 | 50 | High gloss, good mechanical properties, exterior stability and appearance for sol color and clear coat systems for car refinish and industrial systems. | |
| 10000 | 5-10 | 50 | Excellent doi, mechanical properties, gloss weathering and chemical resistance f | |
| 4000 | 5 -10 | 50 | 2K-systems for all purposes applications. | |
| 10000 | 5-10 | 50 | Fast drying, high build and gloss, excellent mechanical properties and chemical resitance, practically no yellowing under UV-light, high solids content. | |
| 9500 | 5 -10 | 50 | | |
| 4500 | 5-10 | 100 | Excellent gloss level, doi, grinding, mechanical properties, out-door durability f 2K-systems. | |
| 7000 | 5-10 | 200 | | |
| | | | | |

Solvimor® AP

Liquid thermoplastic acrylic resins

| ı | Grade | Supply | y Form | Specifications | | | |
|---|----------------------|------------|---------------------------|---------------------|-----------------------|-----------------|--|
| ı | Grade | Solids ±2% | Solvent type | Viscosity (Gardner) | Approx. BF. Viscosity | Max. Acid Value | |
| ı | AROMATIC SO | LVENT FREE | - THERMOPLASTIC ACRY | LIC RESINS | | | |
| | P4550-ECO | 50 | Butyl acetate | Z2-Z4 at 50% | 4500 | 1 | |
| ı | STANDARD TH | ERMOPLAS | TIC ACRYLIC RESINS | | | | |
| ı | P14055-T | 55 | Toluene | Z6 at 55% | 14000 | 10 | |
| | P15055-X | 55 | Xylene | Z6 at 55% | 15000 | 10 | |
| | P0240-W | 60 | White spirit | H-L at 40% | 200 | 5 | |
| ı | P4560-W | 60 | White spirit | Z2-Z4 at 60% | 4500 | 5 | |
| | P7560-T ¹ | 60 | Toluene | Z4-Z5 at 60% | 7500 | 10 | |
| | P3560-X | 60 | Xylene | Z1-Z3 at 60% | 3500 | 10 | |
| ı | P1035-MS | 35 | Xylene/ Butyl acetate | V-X at 35% | 1000 | 1 | |
| ı | P2250-MS | 50 | Xylene/ Solvesso100 | X-Z1at 50% | 2200 | 10 | |
| ı | P4655-X | 55 | Xylene | Z2 – Z4 at 55% | 4600 | 10 | |
| ı | P5045-MS | 45 | Ethyl acetate/ MIBK | Z3-Z4 at 45% | 5000 | 5 | |
| ı | P5050-MS | 50 | Xylene/ Solvesso100 (1/1) | Z2-Z4 at 50% | 5000 | 5 | |
| | P5060-T ² | 60 | Toluene | Z3-Z5 at 60% | 5000 | 12 | |
| | P10050-T | 50 | Toluene | Z4-Z6 at 50% | 10000 | 1 | |
| | P10060-T | 60 | Toluene | Z5-Z6 at 60% | 10000 | 10 | |
| | P3560-X | 50 | Xylene | Z1-Z3 at 60% | 3500 | 10 | |
| | P7060-T ³ | 60 | Toluene | Z3-Z5 at 60% | 7000 | 1 | |
| | P3542-T | 50 | Toluene | Y-Z at 50% | 3500 | 1 | |
| | P1050-MS | 40 | Xylene/ Toluene | V-X at 50% | 1000 | 4 | |
| | | | | | | | |

¹⁻ Available in X version based on xylene. 2- Available in X version based on xylene. 3- Available in LV versions visc. Z1-Z3 at 60%

| Max. Color (Hazen) | Characteristics and Main Applications |
|--------------------|--|
| | |
| 50 | Aromatic solvent free with very short air drying time, excellent compatibility with LPG for aerosol paints. |
| | |
| 50 | |
| 50 | Fast drying time, excellent durability, good adhesion and gloss for stamp concretes and outdoor paints. |
| 50 | Excellent adhesion on asphalt, concrete and stones with excellent abrasion, alkali, humidity resistance and fast drying time, suitable for stone varnishes and cement facing substrates or primers. |
| 50 | Fast drying time, good and permanent flexibility, excellent insulating properties for low viscosity primers with very good penetration properties. |
| 50 | Very good adhesion on asphalt, concrete and stones, very good abrasion resistance, alkali and humidity resistance, very good exterior and interior properties with excellent hardness properties. Recommended for road marking paints with very good adhesion on all materials used in the horizontal marking of streets, |
| 50 | highways, etc., also offer good adhesion to the glass beads for the light reflectance paints and varnishes for facades, swimming pools, garages, floor marking, etc. With high recommendations for hot weather countries. |
| 50 | Outstanding exterior durability and color retention with excellent compatibility with CAB and N.C. Fast drying clear-coat for automotive refinish systems. |
| 50 | Excellent drying time with medium viscosity, durable and flexible clear and hard film. Recmmended for wet to wet applications for the manufacture of new concrete roof tiles with hard film and also masonry paints. |
| 50 | Excellent drying time with medium viscosity, very good adhesion on plastic substrates, general purpose masonry, decorative applications. |
| 50 | |
| 50 | Excellent drying time with medium viscosity, adhesion on metal substrates and concrete, suitable for wet to wet application, pigmented and transparent paints for metal. |
| 50 | Suitable for aluminum paint due to its low acid value with high compatibility with LPG and suitability for spray application accompanied by fast physical drying, very good exterior and interior properties, excellent hardness, good alkali and humidity resistance and compatible with LPG. |
| 50 | Outstanding exterior durability and color retention, compatible with CAB and NC, fast drying clear-coat for the automotive industry. |
| 50 | Very good adhesion on asphalt, concrete and stones, very good abrasion resistance, alkali and humidity resistance, very good exterior and interior properties with excellent hardness properties. recommended for road marking paints with very good adhesion on all materials used in the horizontal marking of streets, |
| 50 | highways, etc., also offer good adhesion to the glass beads for the light reflectance paints and varnishes for facades, swimming pools, garages, floor marking, etc. With high recommendations for hot weather countries. |
| 50 | Medium viscosity - very good drying, compatible with LPG. Suitable for road marking, spray applications, aluminum paint and a general purpose thermoplastic acrylic. |
| 200 | Low solid content, high viscosity with perfect weathering durability and color stability, it is compatible with CAB for base coat and clear coat for 1K car refinishing. |
| 200 | Excellent grindability, compatibility with different resin types like CAB for base coat 1K car refinishing. |

Solvimor®AT

Liquid thermosetting acrylic resins

| Grade | Supply | y Form | Specifications | | |
|------------|------------|-------------------------------------|--------------------|-----------------------|-----------------|
| Grade | Solids ±2% | Solvent type | Viscosity(Gardner) | Approx. BF. Viscosity | Max. Acid Value |
| T2258-MS | 58 | Mixed solvents | Z1 - Z3 at 58% | 2200 | 6-17 |
| T2058-MS | 58 | Mixed solvents | X - Z at 58% | 2000 | 6-17 |
| T-H1050-MS | 50 | Xylene/ N-butanol (3/1) | V - X at 50% | 1000 | 10 -18 |
| T-A0850-MS | 50 | Xylene/ Butanol (3/1) | U-W at 50% | 800 | 10 - 17 |
| T-A1050-MS | 50 | Solvent naphtha150ND/Butanol (1/1) | U - W at 50% | 1000 | 13 - 18 |
| T-A1850-MS | 50 | Solvent naphtha150ND/Butanol (2/1) | X - Y at 50% | 1800 | 7 - 12 |
| T-A2060-MS | 60 | Solvent naphtha150ND/Butanol (2/1) | Y - Z at 60% | 2000 | 8 - 13 |
| T-A0450-MS | 50 | Solvent naphtha 150ND/Butanol (1/1) | N-Q at 50% | 400 | 13-18 |

| | Characteristics and Main Applications |
|--------------------|--|
| Max. Color (Hazen) | Characteristics and Main Applications |
| 50 | Good sterilization resistance with excellent balance between flexibility and hardness makes it suitable for can coating and two piece can bte coat. |
| 50 | Good sterilization resistance, flow, acceptance of UV-curable printing ink, deep drawing for two piece can bte coating, external lines, twist off lids, crown and screw caps. |
| 150 | Thermosetting hydroxyl acrylic resin. Good weathering resistance, scratch resistance, flexibility and compatibility with CAB. Indicated for automotive metallic bte coat and clear transparent top coats and stoving enamels. |
| 250 | Thermosetting acrylic acrylamide resins with excellent flexibility, detergent resistance, high build and adhesion for stoving enamels and domestic appliances. |
| 100 | |
| 100 | Thermosetting acrylic acrylamide resins. Combined with epoxy resin 10% (BADGE) epoxy equivalent 450-500 offering good |
| 150 | balance between hardness and flexibility, good chemical resistance for can bte coats with good sterilization properties and over print varnishes (OPV) and high gloss on wet on wet appliances with good sterilization properties. |
| 100 | |

Solvimor® EP Liquid epoxy resins

Product Specifications

| Grade | lo | | Supply Form | Specifications | | | |
|--------|-----|------------|--|---------------------|-----------------------|----------------|--|
| Grac | ie | Solids ±2% | Solvent type | Viscosity (Gardner) | Approx. BF. Viscosity | OH-Content (%) | |
| EP5025 | -MS | 50 | Solvent naphtha 150ND/ Butyl glycol (4/1) | Z-Z1 at 50% | 2,500 | 4.0 | |
| EP0650 |)-X | 50 | Xylene | U - V at 50% | 600 | 4.0 | |
| EP3855 | -MS | 55 | Solvent naphtha 150ND/ Butyl glycol (3/2) | Z2 - Z3 at 55% | 3,800 | 4.0 | |

Solvimor® AM Liquid amino resins

| Grade | | Supply Form | Specifications | | | |
|------------|------------|--|---------------------|-----------------------|-----------------|--|
| Grade | Solids ±2% | Solvent type | Viscosity (Gardner) | Approx. BF. Viscosity | Max. Acid Value | |
| AM0855-MS | 55 | Isobutanol / Xylene (10/1) | U-V at 55% | 800 | 1.5 | |
| AM11070-B | 70 | Butanol | Z5 at 70% | 11000 | 1 | |
| AM14085-B | 85 | Butanol | Z5-Z6 at 85% | 14000 | 1.5 | |
| AM16077-MS | 77 | Solvent naphtha 150ND / N-butanol (2/1) | Z6 at 77% | 16000 | 2 | |
| AM0570-B | 70 | Butanol | S at 70% | 500 | 2 | |
| AM0663-MS | 63 | Xylene / Butanol (1/2) | T-U at 63% | 600 | 3 | |

| | Characteristics and Main Applications | | | | | |
|-----------------|---|--|--|--|--|--|
| Max. Acid Value | Characteristics and Main Applications | | | | | |
| 4 | Excellent flexibility, adhesion, and hardness for opv and collapsible tubes enamels of can coating. | | | | | |
| 4 | Good chemical resistance, flexibility, adhesion, recommended for primers both air dry and stoving mechanisms for protective coatings, OPV and collapsible tubes enamels of can coating and primers for automotive refinishes. | | | | | |
| 4 | Good weathering and yellowing resistance, good hardness and flexibility for can coating non-yellowing OPV. | | | | | |

| | | | Characteristics and Main Applications | | | | |
|---------------------|--------------------|--------------|--|--|--|--|--|
| Free Formaldehyde % | Max. Color (Hazen) | Appearance | Characteristics and Main Applications | | | | |
| 0.7 | 100 | Clear | Good reactivity, compatibility and over-bake resistance for general purposes stoving enamels. | | | | |
| 0.8 | 100 | Clear | Excellent weathering resistance, flow and reactivity for automotive top and clear coats and general stoving enamels. | | | | |
| 0.3 | 100 | Clear | Good gloss and compatibility for can and coil coatings and automotive refinishes. | | | | |
| 0.5 | 100 | Clear | Low-medium reactivity, excellent mechanical properties, sterilization resistance for can coatings. | | | | |
| 0.7 | 100 | Clear | Good sterilization resistance, reactivity and mechanical properties for can and automotive coatings. | | | | |
| 0 | 100 | Clear / Hazy | Good sterilization resistance, epoxy resins compatibility recommended for can coatings, acid curing and stoving enamels. | | | | |

Solvimor® FP

Grade

Polyurethane flexible packaging adhesive resins

Composition

Product Specifications

| Viscosity (at 25°C approx. cPs) | Curing | Appearance | Mixing Ratio |
|---------------------------------|-------------------------------|------------|--------------|
| AGING | | | |
| 750 ± 150 | | | 100.00 |
| | 7 days for complete curing | Clear | |
| 3500 ± 500 | 1-2 days for laminates | | 20.00 |
| GING | | | |
| 2500±1000 | 7 days for complete curing | Clear | 100.00 |
| 500-1000 | 1-2 days for laminates | Cicui | 75.00 |
| 3000±1000 | 7 days for complete | Clear | 100.00 |
| 1500±800 | curing 1-2 days for laminates | | 60.00 |
| | | | |
| 8000±1500 | | | 100.00 |
| | 7 days for complete | | |
| 450±50 | 1-2 days for laminates | Clear | 50.00 |
| | 450±50 | 450±50 | 450±50 |

Specifications

Mixing Ratio

| Recomme | endations | | | |
|------------------------------------|--|---|--|--|
| Suitable Recommended Structures | Suitable Use Recommendations | Characteristics and Main Applications | | |
| | | | | |
| OPA /Alu /P E | | A two component solvent based medium & high performance pu adhesive system, polyester based two-components polyurethane, pasteurizable with high thermal and chemical resistance. Higher initial bonds with high wettability. | | |
| PET /Alu / PE (CPP) | | The adhesive is suitable for the lamination of aluminium containing structures and films such as PE, OPP, CPP, PA, PET with and without sandwich printing. | | |
| OPP /Alu / PE(CPP) | Coffee, Pasta (Wet & Dry), | Recommended for film/film , film/foil laminates and metalized structures. | | |
| OPA / PE | Snack food, Chips, | Laminates produced can be pasteurized and boiled, we suggest a previous lamina- | | |
| OPA / CPP | Meat andCookies | tion test for sterilizable structures. It shows excellent green tack and final bond values, fast curing and low curling effect. The system is suitable in case of high ther- | | |
| PET / PE | Meat and Cookies | mal and chemical resistances are required, the obtained structures resist to steriliza- tion, boiling and pasteurization. Suggested for triplex in line laminations. | | |
| PET / CPP | | Considering the fact that the final result depends not only on the adhesive but on | | |
| PEI/CPP | | other factors (such as pre-treatment of the plastic film, types of printing inks, quantity of slip agent, other additives etc) It's advisable to perform careful preliminary tests before proceeding. | | |
| | | | | |
| OPP / CPP | | A solvent-free general purpose performance composed of two component poly- urethane system recommended for the lamination of transparent, metalized films and foil for dry food packaging. | | |
| OPP / COEX | Chips, Coffee, Meat and Snack foods | Transparent laminates produced with this system are resistant to boiling process. | | |
| OPP / PE | | Application temperature is between 40 – 50 °C. | | |
| PET / PE | | The adhesive has fast running speeds, good machine stability. The system show excellent wettability, good final bonds, resistance to boiling and pasteurization in | | |
| PET / CPP | | transparent structures. | | |
| OPP / CPP | | | | |
| OPP / COEX | | A solvent-free medium to high performance pu adhesive system recommended in lamination of printed films / aluminium or metalized films. | | |
| OPP / PE | Chips, Coffee, Meat and | Suitable for thermal processes like pasteurization and boiling. | | |
| OPP / COEX MET | Snack foods | The system show excellent wettability, good final bond and sealing strength after | | |
| PET / Film MET | | final curing. Many transparent structures are resistant to boiling and pasteurization. | | |
| | | A high performance lower concentration of free isocyanate monomers, PAA safe, low risk of adhesive caused anti-sealing effect. | | |
| | | Application temperature is between 50 – 65°C. | | |
| OPP / COEX MET | | Adhesive system, with a high wettability on a variety of film/film and metalized | | |
| PET / Film MET | Coffee, Pasta (Wet & Dry), | structure and very low free mdi monomer content. Can be pasteurizable and boil- able, sterilizable with transparent structures, high chemical resistance. | | |
| OPA / Alu / PE | Meat | Laminates are particularly indicated for production of primary aromatic amine save | | |
| PET / Alu / PE (CPP) | Meac | laminates. Especially for aluminum foil laminates, resistant to pasteurization and boiling resistant. Suitable for transparent, metalized including PET/Alu. | | |
| OPP / Alu / PE (CPP) | | The system shows good final bond and sealing strength after final curing. | | |
| | | In transparent structures the adhesive is suitable for thermal process such as boiling and pasteurization, the adhesive was especially developed for the lamination at high machine speed (>250m/min). | | |
| | | | | |

Solvidur®

Solvent base additives

Solvidur® represents Egyptian British Co. premium quality of most important additives to add an extra step towards the ideal paint formula that satisfies our clients. alkyd emulsifier for water reducible alkyd based paints, wax dispersion for aluminum orientation development and short wave defect reduction, alkyd driers and polyisocyanate hardeners for wood and metal coatings.





Selective production of additives

We take the track of some solvent based paints additives on a very selective way, that enables us to leave a finger-print in the path of paints raw materials industries, especially the specialty chemicals field.

With this selective production strategy that Egyptian British Co. is following, we were keen to present our partners and clients very valuable well-established product range to serve all solvent based paints fields from decorative paints, wood coatings, metal, marine, car refinish coatings.

Wax-Dispersion

The wax-dispersion is the essential required additive due to its important role in the high reflection effect through the short wave defect reduction, improvement of effect pigments orientation and in-can sedimentation reduction that all plays the important role in improvement of D.O.I for car refinish systems.





Alkyd Emulsifier

Now with Egyptian British Co., and with a very simple paint production processing, it becomes extremely simple to produce water reducible alkyd paint.

Water reducible paint is the ideal path to reduce cost through solvent amount reduction, all plus the eco-friendly behavior of the paint. No worries about any of the final paint characters, like whiteness, opacity, gloss etc...

We also provide the ideal alkyd types to be used for this type of paints.

Alkyd Driers

A full range of metal Octoate alkyd driers with a wide range of metal concentrations, are provided by Egyptian British Co. according to our strategy "completing the range", so now you can use its grades of cobalt, zirconium, calcium, lead and manganese Octoate as one of your main formula ingredient with excellent performance made with excellent experience.





Poly-isocyanate hardeners

As an extra mile step, we offer both aromatic and aliphatic ranges. With weather-stability and non-yellowing properties, very good compatibility with highly branched polyols for all purposes, wood, car and metal coatings.

Solvidur® AE Alkyd emulsifier

Product Specifications

| Grade | Supply Form | | Specifications | | | |
|-----------|-------------|--------------|----------------|--------------------------|--|--|
| Grade | Solids ±2% | Solvent Type | pH - at 23 °C | Density - at 23 °C Kg./L | | |
| AE0445-NS | 45 | | 7.5 - 9 | 1.25 | | |

Solvidur® WD

Wax dispersion

| Grade | Suppl | y Form | | Specifications |
|------------------------|------------|---------------------------------|-------------------------------|-----------------------------------|
| Grade | Solids ±2% | Solvent Type | Melting point °C ¹ | Particle size (Hegman gauge 50µm) |
| WD0106-MS ² | 6.00 | Xylene / Butylacetate / Butanol | 105.00 | <20 |

¹⁻ Based on wax content

²⁻WD106 - MS should be stirred well before use after which they are added before CAB addition (preferably via the Alu slurry) to the binder solution during continues stirring.

| Approx. BF. Viscosity | Characteristics and Main Applications |
|-----------------------|---|
| 200 - 600 | It is an emulsifier additive that having the ability to produce a water reducible solvent based paints via its hydrophobic - hydrophilic terminals it is useful to reduce VOC and cost in solvent based paints with at least 15% water combination. |

| Approx. BF. Viscosity | Color | Appearance | Characteristics and Main Applications |
|-----------------------|-------|------------|--|
| 10±5 | White | Liquid | It is recommended for use in solvent based base coats and one coat metallic top Coats. It is essential due to its rule in improving the orientation of effect pigments(alu, mica, etc.), reduces the short wave defect (mottling, bernard cells), enhances the flip-flop effect, reduces the sedimentation tendency in the cans and improves the D.O.I. of clear coats. |

Solvidur® AD Alkyd driers

| | Supply Form | | | Specifications |
|-------------|-----------------|--------------|----------------------|---|
| Grade | Metal content % | Appearance | Max. Color (Gardner) | Max. Viscosity (at 30°C in sec. by F/C No. 4) |
| ZIRCONIUM O | CTOATE DRIE | RS | | |
| AD-Zr24 | 24.00±0.20 | Clear liquid | 5 | 300 |
| AD-Zr20 | 20.00±0.20 | Clear liquid | 5 | 100 |
| AD-Zr18 | 18.00±0.20 | Clear liquid | 4 | 70 |
| AD-Zr12 | 12.00±0.20 | Clear liquid | 4 | 30 |
| AD-Zr10 | 10.00±0.20 | Clear liquid | 2 | 15 |
| AD-Zr8 | 8.00±0.20 | Clear liquid | 2 | 15 |
| AD-Zr6 | 6.00±0.10 | Clear liquid | 2 | 15 |
| CALCIUM OCT | OATE DRIERS | | | |
| AD-Ca10 | 10.00±0.20 | Clear liquid | 5 | 50 |
| AD-Ca6 | 6.00±0.20 | Clear liquid | 4 | 40 |
| AD-Ca5 | 5.00±0.20 | Clear liquid | 4 | 30 |
| AD-Ca4 | 4.00±0.20 | Clear liquid | 4 | 20 |
| COBALT OCTO | ATE DRIERS | | | |
| AD-Co12 | 12.00±0.20 | Clear liquid | Violet | 250 |
| AD-Co10 | 10.00±0.20 | Clear liquid | Violet | 200 |
| AD-Co8.4 | 8.40±0.20 | Clear liquid | Violet | 55 |
| AD-Co8 | 8.00±0.20 | Clear liquid | Violet | 50 |
| AD-Co6 | 6.00±0.20 | Clear liquid | Violet | 45 |
| AD-Co5 | 5.00±0.20 | Clear liquid | Violet | 40 |
| AD-Co4 | 4.00±0.10 | Clear liquid | Violet | 30 |
| AD-Co1 | 1.00±0.10 | Clear liquid | Violet | 20 |
| LEAD OCTOAT | E DRIERS | | | |
| AD-Pb36 | 36.00±0.20 | Clear liquid | 4 | 75 |
| AD-Pb33 | 33.00±0.20 | Clear liquid | 4 | 60 |
| AD-Pb32 | 32.00±0.20 | Clear liquid | 4 | 45 |
| AD-Pb30 | 30.00±0.20 | Clear liquid | 4 | 40 |
| AD-Pb24 | 24.00±0.20 | Clear liquid | 4 | 30 |
| MANGANESE | OCTOATE DRI | ERS | | |
| AD-Mn10 | 10.00±0.20 | Clear liquid | Reddish brown | 500 |
| AD-Mn6 | 6.00±0.20 | Clear liquid | Reddish brown | 100 |

| | Characteristics and Main Applications | |
|----------------------------|--|--|
| Specific gravity (at 30°C) | Characteristics and main Applications | |
| | | |
| 1.25±0.03 | | |
| 1.13±0.03 | | |
| 1.10±0.03 | | |
| 0.97±0.03 | Metallic salt of synthetic carboxilic acid of 1-24% Zr-metal in aliphatic hydrocarbon solvent, suitable for alkyd based systems as a drier. | |
| 0.94±0.03 | Suitable for alkya based systems as a uner. | |
| 0.87±0.03 | | |
| 0.85±0.03 | | |
| | | |
| 1.01±0.03 | | |
| 0.91±0.03 | Metallic salt of branched-chain synthetic fatty acid of 1-10% Ca-metal in aliphatic hydrocarbon | |
| 0.90±0.03 | solvent, suitable for alkyd based systems as a drier. | |
| 0.87±0.03 | | |
| | | |
| 1.02±0.03 | | |
| 0.97±0.03 | | |
| 0.94±0.03 | | |
| 0.94±0.03 | Metallic salt of synthetic carboxilic acid of 1-24% Co-metal in aliphatic hydrocarbon solvent, | |
| 0.89±0.03 | suitable for alkyd based systems as an active surface drier and as initiator for UPR in FRP field. | |
| 0.87±0.03 | | |
| 0.84±0.03 | | |
| 0.79±0.03 | | |
| | | |
| 1.40±0.03 | | |
| 1.32±0.03 | | |
| 1.28±0.03 | Metallic salt of synthetic carboxilic acid of 1-36% Pb-metal in aliphatic hydrocarbon solvent, | |
| 1.22±0.03 | suitable for alkyd based systems as a drier or an additive in anti-corrosion fluids. | |
| 1.11±0.03 | | |
| | | |
| 1.01±0.03 | | |
| | Metallic salt of branched-chain synthetic fatty acid of 1-10% Mn-metal in aliphatic hydrocarbon solvent, suitable for alkyd based systems as a drier. | |
| 0.90±0.03 | | |

Solvidur® AL Aliphatic polyisocyanate hardeners

Product Specifications

| Grade | Supply | Form | Specifi | cations | |
|---------------|--------------|--------------------------------|-----------------------|-------------|--|
| Grade | Solids ±2% | Solvent Type | Approx. BF. Viscosity | Nco Content | |
| HDI BIURET AL | IPHATIC CROS | SLINKER | | | |
| AL2200-NS | 100 | No solvent | 10000 | 22 | |
| AL2300-NS | 100 | No solvent | 2500 | 23 | |
| AL1650-MS | 75 | Methoxy propyl acetate/ Xylene | 250 | 16.5 | |
| AL1650-MPA | 75 | Methoxy propyl acetate | 250 | 16.5 | |
| AL1650-BA | 75 | Butyl acetate | 160 | 16.5 | |

Solvidur® AR Aromatic polyisocyanate hardeners

Product Specifications

Supply Form

| Grade | | | | | |
|--------------|--------------|--------------------------------|-----------------------|-------------|--|
| Grade | Solids ±2% | Solvent Type | Approx. BF. Viscosity | Nco Content | |
| TDI-BASED AR | OMATIC CROSS | SLINKER ADDUCT | | | |
| AR1330-EA | 75 | Ethyl acetate | 1600 | 13.3 | |
| AR1190-MS | 75 | Methoxy propyl acetate/ Xylene | 1600 | 11.9 | |
| AR1190-BA | 75 | Butyl acetate | 600 | 11.9 | |
| | | | | | |

Specifications

| Equivalent Weight | Functionality | Characteristics and Main Applications | | |
|-------------------|---------------|---|--|--|
| | | | | |
| 190 | 3.8 | Weather-stable and non-yellowing topcoats. Very good compatibility with highly branched polyols. | | |
| 185 | 3.5 | Lower viscosity than Solvidur® AL 2200-NS, for weather-stable and non-yellowing high solids coatings, structural coatings and topcoats. | | |
| 255 | 3.8 | | | |
| 255 | 3.8 | Special supply forms of Solvidur® AL 2200-NS, for different applications. Other supply forms available. | | |
| 255 | 3.8 | o rundo i c. | | |

| | | Characteristics and Main Applications | | |
|-------------------|---------------|---|--|--|
| Equivalent Weight | Functionality | Characteristics and Main Applications | | |
| | | | | |
| 315 | 2.7 | Ultra-low monomer grade of Solvidur® AL 1650 - BA. | | |
| 350 | 2.7 | Crosslinker for use in anti-corrosion coatings, industrial coatings, wood and furniture finishes, | | |
| 350 | 2.7 | concrete coatings as well as solvent-borne adhesives. | | |

Important methods and information

1. General important basic measurement principles and methods:

| Type of measurement | Main principle | Method of measurement |
|--|---|--|
| Determination of solid content / non-volatile matter | Determining the residual non-volatile matter by calculating the percentage of weight before and after heating a known weigh of the resin | Bring a flat bottomed dish with 5-7 cm diameter and 1 cm height. Put 1-2 gm of the resin into the previously empty weighted and noted dish (S1). The total weight will be noted (S2), so the sample weight in the dish is S2-S1. Sample then will be dried at 120°C for 1 hr. Then, after cooling the dish at room temp., weight the residual sample with the dish (S3). Solid content = (S3-S1)/(S2-S1) * 100 |
| Determination of acid value for resin solution | The acid value of a resin is the number of milligrams of potassium hydroxide required to neutralize the free acids in 1g of the resin | 1. 10g of resin is put into a flask and dissolved in a mixture of neutralized ethanol and toluene (1:1). 2. Titrate with PhPh. Solution against a solution of KOH into an alcohol of 0.2 normality. 3. Calculate (ml KOH solution × normality × equivalent weight of KOH) = S1. 4. Calculate the (weight of sample (solids) in grams × solid content %) = S2. 5. acid value = S1/S2 |
| Determination of the viscosity of resin solution | viscosity of resin solution is determined by a comparison between the rate of air bubble arises in an inverted tube filled with the resins solution against the rate of arisen bubble in an inverted tube filled with a standard solution | A clear glass tube is filled with the sample resin until 8mm to the open end, and then closed with a stopper to 5mm from the open end of the tube. Care should be taken that the sample is not containing any air bubbles or solid particles. Then temperature of the sample tube and standard tubes should be adjusted to 20C using a water bath. After that, all tubes are held together in a position that both liquid levels are the same. Invert both tubes together on same time. The standard tubes which are matching the sample tube are noted. Finally, viscosity is determined by determining the rate of bubble rising in corresponding rates in the two most closely matching standard tubes. |
| Determination of the Compatibility of resin solution | two or more resins are considered to be compatible in case of they are mixed with each other and the final mixture is shown as a clear solution until the solvent evaporated | Dissolve the binder samples that are going to be tested in an appropriate solvent. Mix solutions with each other in proportions of (90:10, 75:25, 50:50, 25:75, 10:90). Mix the resultant mixture vigorously. Pour the yield into a glass plate and evaporate the solvent. in case it is still clear without cloudiness, turbidity or flocculation it is considered to be compatible. |

2. General important information about important resins and paints ingredients

2.1. How to choose the ideal solvent for your paint:

2.1.1. Important solvent properties

To choose the ideal solvent that can be used into your coating formulation, it is very important to get more deeper into some other important information, like distillation range, flash point, boiling point, evaporation rate, ... etc.

| Solvent Family | Solvent Sub-family | Solvent Type | Specific gravity at 16 °C (60 °F) | Distillation Range °F (°C) | Flash Point TCC* °F (°C) |
|----------------|------------------------|--------------------------------------|---|----------------------------------|-----------------------------|
| | | Hexane | 0.675 (5.62) | 152-157 (67-70) | 0 (-18) |
| | | VM & P naphtha | 0.755 (6.28) | 250-300 (121-149) | 60 (16) |
| | Aliphatic hydrocarbons | Stoddard solvent | 0.767 (6.39) | 310-370 (154-188) | 100 (38) |
| | | Mineral spirits | 0.771 (6.42) | 310-400 (154-204) | 100 (38) |
| | | 140 Solvent | 0.784 (6.53) | 360-415 (182-213) | 140 (60) |
| arbons | | Toluene | 0.871 (7.62) | 230-231 (110-111) | 41 (5) |
| Hydrocarbons | | Xylene | 0.871 (7.26) | 281-284 (139-140) | 81 (27) |
| | Aromatic hydrocarbons | Medium-Flash Aromatic naphtha1 | 0.874 (7.28) | 310-350 (154-177) | 110 (43) |
| | | High-Flash Aromatic naptha2 | 20.887 (7.39) | 360-410 (182-210) | 142 (61) |
| | | Turpentine | 0.862 (7.17) | 310-324 (154-162) | 91 (33) |
| | Terpenes | Dipentene | 0.850 (7.09) | 340-360 (171-182) | 125(51) |
| | | Pine oil | 0.922(7.68) | 410-425(210-218) | 185(85) |

| Solvent Family | Solvent sub-family | Solvent Type | Molecular Weight |
|----------------|--------------------------|--------------------------------------|------------------|
| Hydrocarbons | Chlorinated hydrocarbons | Methylene chloride | 84.94 |
| Tiyarocarbons | | Methyl chloroform | 133.4 |
| | | Acetone | 58.08 |
| | | Methyl ethyl ketone | 72.1 |
| | | Methyl isobutyl ketone | 100.16 |
| | Ketones | Methyl isoamyl ketone | 114.19 |
| | | Methyl n-propyl ketone | 86.13 |
| | | Diacetone alcohol | 116.16 |
| | | Cyclohexane | 98.15 |
| | | Isophorone | 138.2 |
| | | Methanol | 32 |
| | | Ethanol anhydrous | 46.07 |
| | | n-Propanol | 60.1 |
| | | Isopropanol anhydrous | 60.1 |
| | Alcohols | Isobutanol | 74.12 |
| | | n-Butanol | 74.12 |
| | | secondary butanol | 74.12 |
| | | Tertiary butanol | 74.12 |
| | | Amyl acohol (mixed isomers) | 88.15 |
| Solvents | | Cyclohexanol | 100.16 |
| <u>×</u> | | Ethylene glycol monomethyl ether | 76.1 |
| | | Ethylene glycol monoethyl ether | 90.1 |
| ted | | Ethylene glycol monobutyl ether | 118.2 |
| xygenated | | Propylene glycol monomethyl ether | 90.1 |
| yg | Glycol ethers | Propylee glycol monopropyl ether | 118 |
| ŏ | | Diethylene glycol monomethyl ether | 120.2 |
| | | Diethyene glycol monoethyl ether | 134.2 |
| | | Diethylene glycol monobutyl ether | 162.2 |
| | | Dipropylene glycol monomethyl ether | 148.2 |
| | | Ethyl acetate | 88.11 |
| | | Isopropyl acetate | 102.13 |
| | | n-Propyl acetate Isobutyl acetate | 102.13 116.16 |
| | Esters | n-Butyl acetate | 116.16 |
| | LSters | sec-Butyl acetate | 116.16 |
| | | Amyl acetate | 130.19 |
| | | Isobutyl-isobutyrate | 114.2 |
| | | 2-Ethylhexyl acetate | 172 |
| | | Ethylene glycol monoethether acetate | 132.2 |
| | | Propylene glycol monoetether acetate | 132.2 |
| | | Butyl lactate | 146.11 |
| | | 2-Nitropropane | 89.09 |
| | | Tetrahydrofuran | 72.1 |
| | Nitroparaffins | Dimethyl formamide | 73.09 |
| | | n-Methyl 2 pyrrolidone | 99.1 |
| | | | |

| 1.326(11.05) 103.6°F(39°C) None 14.5 355 1.32(11) 80°F(30°C) None 3.5 100 0.792 (6.59) 56 (132) -9/20 (15/-4) 9 18t 0.300 (6.71) 80 (174) -5-6(22/21) 4 70 0.802 (6.68) 127 (260) 23/16 (73/60) 1.6 15 0.314 (6.77) 145 (298) 46/36 (115/96) 0.5 6 0.314 (6.77) 145 (298) 46/36 (115/96) 0.5 6 0.314 (6.77) 145 (298) 46/36 (115/96) 0.5 6 0.341 (6.77) 145 (298) 46/36 (115/96) 0.5 6 0.394 (7.64) 168 (334) 62/52 (144/126) 0.2 11 0.947 (7.90) 156 (313) 54/44 (130/111) 0.2 2 10.947 (7.90) 156 (313) 54/44 (130/111) 0.2 2 10.932 (7.68) 215 (419) 96/82 (265/179) 0.03 0.2 0.793 (6.50) 65 (149) 17/11 (62/52) 6 99 0.799 (6.58) 78 (172) 16/13 (60/56) 2.6 43 0.806 (6.70) 97 (207) 31/23 87/7 4 1.0 11 0.786 (6.54) 82 (180) 16/12 (60/53) 2 33 0.803 (6.68) 108 (226) 38/30 (100/86) 0.7 88 0.381 (6.75) 118 (244) 43/37 (110/98) 0.5 44 0.380 (6.73) 100 (212) 27/23 (80/74) 0.9 12 0.786 (6.54) 83 (181) 16/11 (60/52) 1.1 44 0.813 (6.77) 130-138 (266-280) 48/39 (118/102) 0.3 2 0.781 (6.79) 161 (322) 66/63 (154/145) 0.1 0.1 0.948 (7.91) 161 (322) 66/63 (154/145) 0.1 0.1 0.954 (7.91) 161 (322) 66/63 (154/145) 0.1 0.1 0.966 (8.01) 124(255) 41(106) 4.7 66 0.931 (7.73) 135(275) 48/113) 0.3 3 0.9027 (49) 17 (1540) 63(145) 0.06 0.7 112 (248) 34(94) 0.7 12 0.968 (8.71) 17 (140) 63(145) 0.01 0.0 0.923 (7.69) 120 (248) 34(94) 0.7 12 0.952 (7.94) 17 (1540) 63(145) 0.01 0.0 0.952 (7.94) 17 (1540) 63(145) 0.01 0.0 0.952 (7.94) 17 (1540) 63(145) 0.01 0.0 0.952 (7.94) 17 (1540) 63(145) 0.01 0.0 0.952 (7.94) 17 (1540) 136 (165/55) 2.3 2.2 0.883 (7.35) 102 (216) 18/13 (55/55) 2.3 2.2 0.883 (7.35) 102 (216) 18/13 (55/55) 2.3 2.2 0.883 (7.35) 102 (216) 18/13 (55/55) 2.3 2.2 0.883 (7.36) 19 (12/24) 29/19 (85/66) 1.9 3 0.883 (7.35) 102 (216) 18/13 (55/55) 2.3 2.2 0.883 (7.31) 148 (298) 44/39 (11/101) 0.4 0.883 (7.32) 156 (313) 14/39 (106/101) 0.4 0.883 (7.33) 148 (298) 44/39 (11/101) 0.4 0.883 (7.34) 126 (259) 156 (313) 14/39 (106/101) 0.4 0.883 (7.34) 126 (259) 156 (313) 14/39 (106/101) 0.4 0.885 (7.13) 148 (298) 44/39 (11/101) 0.4 0.885 (7.13) 148 (298) 44/39 (11 | Pressure |
|--|----------|
| 1.32(11) 80°F(30°C) None 3.5 100 0.792 (6.59) 56 (132) -9/-20 (15/-4) 9 184 0.806 (6.71) 80 (174) -5/-6(22/21) 4 7.70 0.802 (6.68) 127 (260) 23/16 (73/60) 1.6 15 0.814 (6.77) 145 (298) 46/36 (115/96) 0.5 6 0.808 (6.73) 103 (217) 22/8 (72/46) 2.5 27.5 0.941 (7.64) 168 (334) 62/52 (144/126) 0.2 11 0.947 (7.90) 156 (313) 54/44 (130/111) 0.2 2 0.923 (7.68) 215 (419) 96/82 (205/179) 0.03 0.2 0.793 (6.50) 65 (149) 17/11 (62/52) 6 90.00 0.799 (6.58) 78 (172) 16/13 (60/55) 2.6 43 0.806 (6.70) 97 (207) 31/23 87/74 1.0 11 0.786 (6.54) 82 (180) 16/12 (60/53) 2 32 0.803 (6.68) 108 (226) 38/30 (100/86) 0.7 8 0.811 (6.75) 118 (244) 43/37 (110/98) 0.5 44 0.808 (6.73) 100 (212) 27/23 (80/74) 0.9 12 0.786 (6.54) 83 (181) 16/11 (60/52) 1.1 44 0.813 (6.77) 130-138 (266-280) 48/39 (118/102) 0.3 2 0.786 (6.54) 83 (181) 16/11 (60/52) 1.1 40 0.813 (6.77) 130-138 (266-280) 48/39 (118/102) 0.3 2 0.948 (7.91) 161 (322) 68/63 (154/145) 0.1 0.1 0.966(8.01) 124(255) 41(106) 4.7 6 0.931(7.73) 135(275) 45(113) 0.3 3 0.902(7.49) 171 (340) 63(145) 0.06 0.07 0.923(7.69) 120(248) 34(94) 0.7 12 0.883(7.36) 302(576) 48(119) 0.21 1. 1.18(8.47) 194(381) 87(188) 0.01 0.0 0.951(7.92) 188(370) 75(167) 2 0.0 0.902(7.91) 171 (1740) 63(145) 0.1 0.0 0.952(7.94) 171 (140) 63(145) 0.1 0.0 0.952(7.94) 171 (140) 63(145) 0.1 0.0 0.952(7.94) 171 (140) 63(145) 0.1 0.0 0.952(7.94) 171 (140) 63(145) 0.06 0.00 0.952(7.94) 171 (140) 63(145) 0.01 0.0 0.952(7.94) 171 (140) 63(145) 0.06 0.00 0.952(7.94) 171 (140) 63(145) 0.06 0.00 0.952(7.94) 171 (140) 63(145) 0.06 0.00 0.952(7.94) 171 (140) 63(145) 0.06 0.00 0.952(7.95) 120(248) 34(94) 0.7 12 0.968(8.73) 102(216) 18/13(65/55) 2.3 2.0 0.883(7.36) 302(576) 48(119) 0.21 1.1 0.884(7.36) 199(387) 90(195) 0.01 0.0 0.952(7.94) 230(146) 104(220) 0.01 0.0 0.952(7.95) 177 (171) 13/(65/621) 1.1 0.884(7.34) 126(259) 38/27(100/81) 1.1 0.883(7.34) 126(259) 38/27(100/81) 1.1 0.883(7.34) 126(259) 38/27(100/81) 1.1 0.883(7.34) 126(259) 38/27(100/81) 1.1 0.883(7.34) 126(259) 38/27(100/81) 0.55 0.00 0.973(8.12) 1.156(3131) 5.77(134) 0.21 | m Hg |
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| 0.883(7.34) 126(259) 38/27(100/81) 1 0.858(7.18) 112(234) 29/19(85/66) 1.9 3 0.876(7.29) 156(313) 41/39(106/101) 0.4 4 0.855(7.13) 148(298) 44/39(111/101) 0.4 5 0.873(7.26) 199(390) 88/71(190/160) 0.55 0 0.975(8.12) 156.3(313) -57(-134) 0.21 2 0.964(8.03) 148(298) -47(-116) 0.39 3 | 25 |
| 0.858(7.18) 112(234) 29/19(85/66) 1.9 3 0.876(7.29) 156(313) 41/39(106/101) 0.4 4 0.855(7.13) 148(298) 44/39(111/101) 0.4 5 0.873(7.26) 199(390) 88/71(190/160) 0.55 0 0.975(8.12) 156.3(313) -57(-134) 0.21 2 0.964(8.03) 148(298) -47(-116) 0.39 3 | 13 |
| 0.876(7.29) 156(313) 41/39(106/101) 0.4 4 0.855(7.13) 148(298) 44/39(111/101) 0.4 5 0.873(7.26) 199(390) 88/71(190/160) 0.55 0 0.975(8.12) 156.3(313) -57(-134) 0.21 3 0.964(8.03) 148(298) -47(-116) 0.39 3 | 8 |
| 0.855(7.13) 148(298) 44/39(111/101) 0.4 5 0.873(7.26) 199(390) 88/71(190/160) 0.55 0 0.975(8.12) 156.3(313) -57(-134) 0.21 2 0.964(8.03) 148(298) -47(-116) 0.39 3 | 30 |
| 0.873(7.26) 199(390) 88/71(190/160) 0.55 0 0.975(8.12) 156.3(313) -57(-134) 0.21 3 0.964(8.03) 148(298) -47(-116) 0.39 3 | 4 |
| 0.975(8.12) 156.3(313) -57(-134) 0.21 3 0.964(8.03) 148(298) -47(-116) 0.39 3 | 5.5 |
| 0.964(8.03) 148(298) -47(-116) 0.39 | 0.4 |
| | 2 |
| | 3 |
| 0.978(8.15) 187(369) -71(-160) 0.5 | 0.4 |
| 0.992(8.24) 120.3(249) 103/82 1.1 12 | 12.9 |
| 0.8887.41 65.4149.7 -6 8 1 | 146 |
| 0.9517.92 153307 153/136 0.17 3 | 3.7 |
| 1.0278.56 202396 204/196 0.06 0 | 0.29 |

2.1.2. Solvent polarity:

Solvent polarity is the key word to get in depth into the effect of solvents on the resins and paints industry, this polarity is a result of electrical charges on molecules, the more electric charge the more polarity and vice versa.

The polarity affects compatibility and solubility parameters of the solvent on the resin and paint formulation, so choosing the ideal solvent depends on its polarity scale.

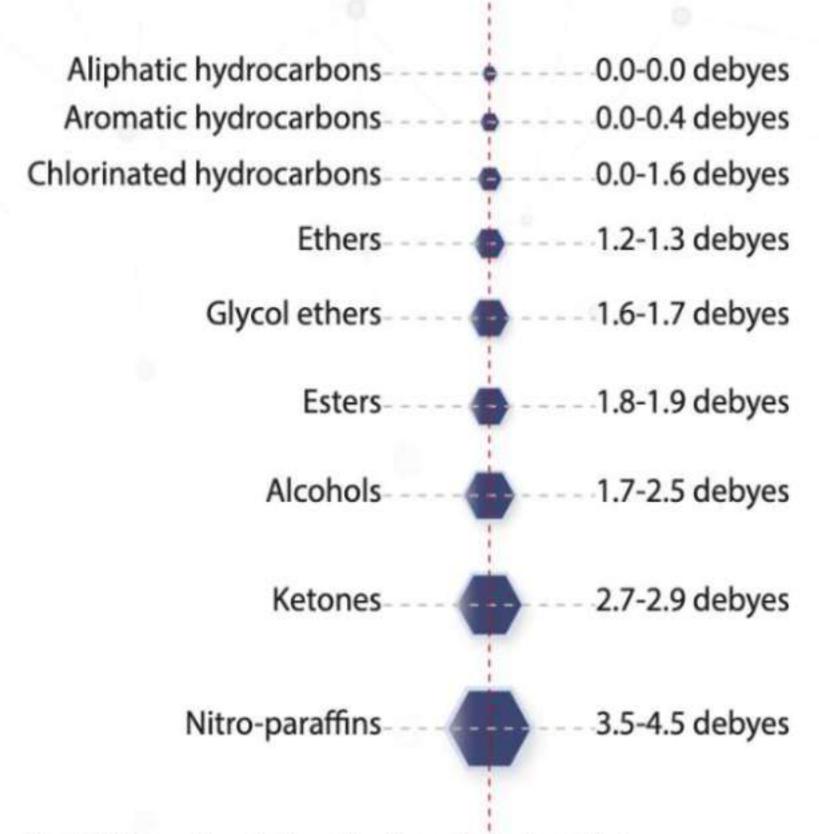


Chart (1) Shows the polarity scale of important solvent classes.

2.2. How to choose the ideal oil for your paint:

To choose the ideal oil for you paint, it is essential to consider the *conjugated double bonds* present into the oiland the *melting point* of that oil. This to determine the exact behavior of the oil into the resin.

2.2.1. Number of conjugated double bonds present in the main oils

The conjugated double bonds present into the oil are represented in form of fatty acids composition that is specifically for each type of oil. This criteria is directly affecting many parameters of the oils like drying time, yellowing resistance and flexibility of the end paint.

| N | FATTY ACID COMPOSITION (PERCENTAGE) | | | | | | | | | | | |
|--------------------------------|-------------------------------------|----------------------|--------------------|------------------------|-----------------------------|----------------------------|-----------------------------|------------------|----------------------|---------------------|-------------------------------|------------------------------|
| Name of the Oil | Caproic (Hexoic) | Caprylic (Octoic) | Capric (Decoic) | Lauric (Dodecanoic) | Myristic (Tetradecanoic) | Palmitic (Hexadecanoic) | Stearic (n-Octadecanoic) | Oleic (C18:1) | Linolenic (C18:3) | Linoleic (C18:2) | Arachidic (20 (Eicesanoic) | Any special fatty acid |
| No. of conjugated D.B. | C10 | C8 | C10 | C12 | C14 | C16 | C18 | C(18:1) | C(18:3) | C(18:2) | C20 | 9,10Dihydroxy Stearic 0.7 |
| Castor Seed Oil | | | | - | | 2 | 1 | 7 | | 5 | | Palmitoleic tr -2. |
| Coconut Oil | 0-0.8 | 5.0-9.0 | 6.0-10.0 | 44.0-52.0 | 13.0-19.0 | 8.0-11.0 | 1.0-3.0 | 5.0-8.0 | | 0-1.0 | 0-0.5 | - |
| Cotton Seed Oil | | **** | **** | more | 0.4 | 20 | 2 | 35 | | 42 | | |
| Linseed Oil (Flax Seed Oil) | - | - | | - | | 4.0-7.0 | 2.0-5.0 | 12.0-34.0 | 35.0-60.0 | 17.0-24.0 | 0.3-1.0 | |
| Olive Oil | | **** | 2 | | 0.1-1.2 | 7.0-16.0 | 1.0-3.0 | 65.0-80.0 | nasia | 4.0-10.0 | 0.1-0.3 | **** |
| Palm Kernal Oil | tr | 3.0-5.0 | 3.0-7.0 | 40.0-52.0 | 14.0-18.0 | 7.0-9.0 | 1.0-3.0 | 11.0-19.0 | - | 0.5-2.0 | tr | |
| Palm Oil | **** | **** | **** | | 0.5-2.0 | 32.0-45.0 | 2.0-7.0 | 38.0-52.0 | **** | 5.0-11.0 | **** | **** |
| Safflower Oil | | | | - | tr.0.5 | 3.0-6.0 | 1.0-4.0 | 13.0-21.0 | tr | 73.0-79.0 | 0.2 | |
| Soya Bean Oil | | | **** | | tr.0.5 | 7.0-11.0 | 2.0-6.0 | 22.0-34.0 | 5.0-11.0 | 43.0-56.0 | **** | |
| Sunflower Seed Oil | **** | **** | **** | | | 3.0-6.0 | 1.0-3.0 | 14.0-35.0 | **** | 44.0-75.0 | 0.6-4.0 | Behenic 0.8 |
| Tung Oil | | | | | | 4 | 1 | 8 | 3 | 4 | | Eleostearic 80.0 |

Table (1) -Shows Fatty acid comosition (percntage) of important solvent classes.

2.2.2. Approximate melting point of the main oils

Each type of oil has its characteristic melting point that directly affects many parameters of the obtained resin and mainly its drying time.

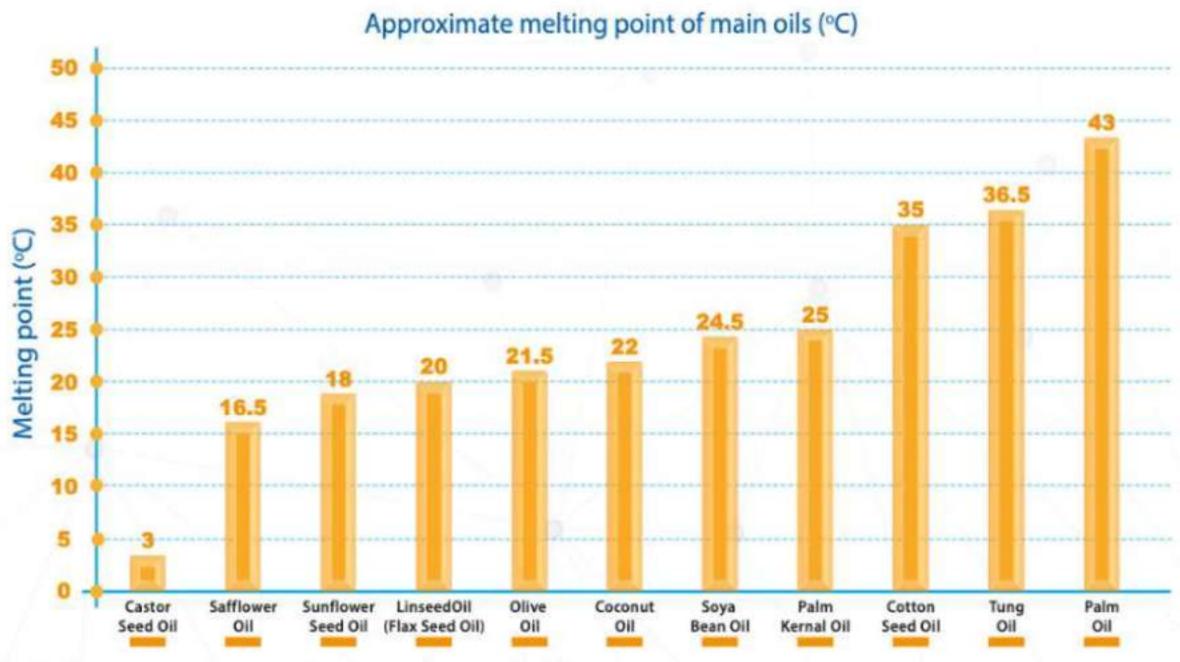
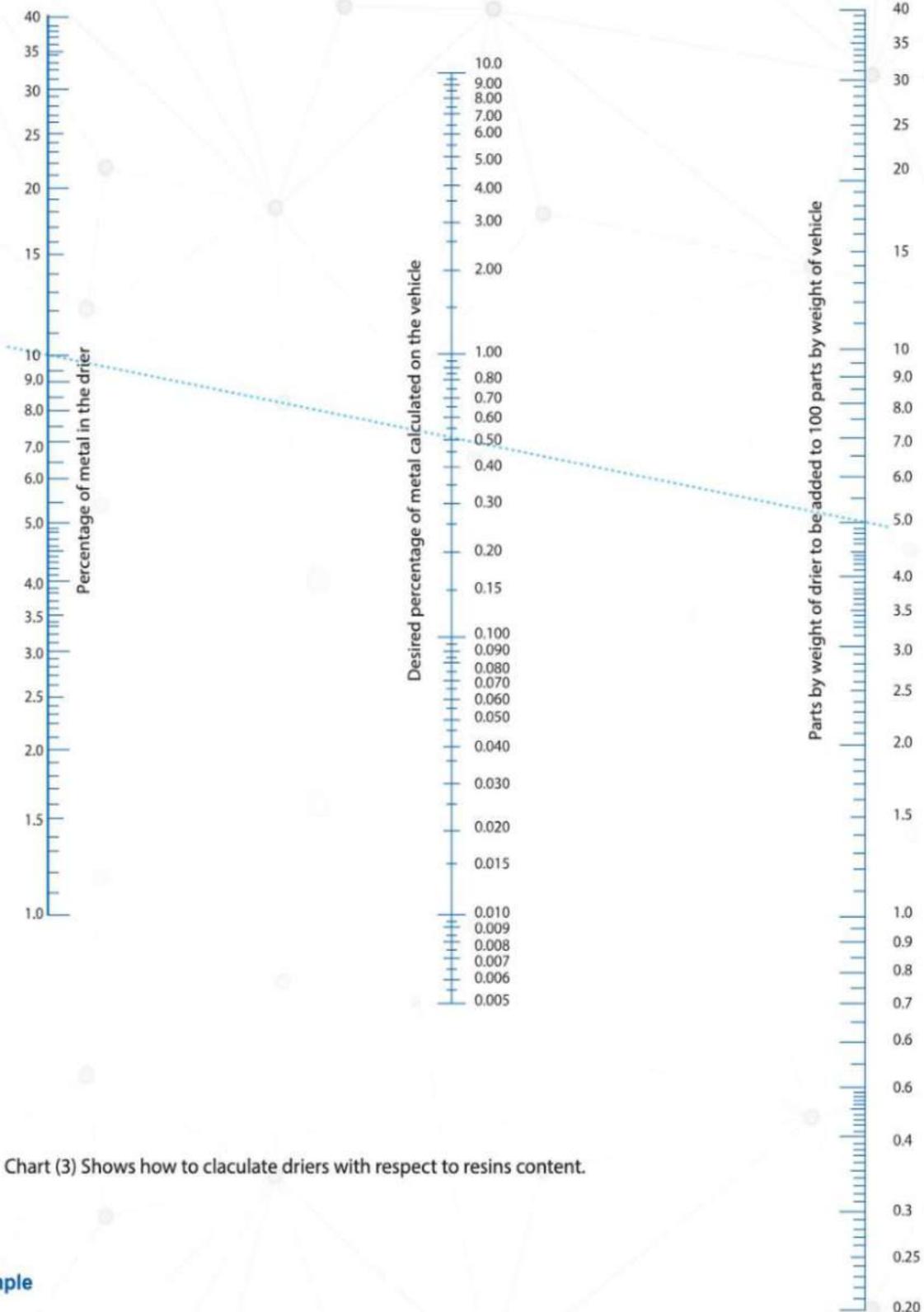


Chart (2): Shows Approximate melting point of main oils (°C).

Important calculations and conversions

1. Calculation of driers



Example

Cobalt Octoate 10% is available. A sicativation of 0.5% of Cobalt, calculated on the solid vehicle, is required.

How much drier must be added?

Draw a line which passes point 10 of the left scale, and point 0.5 of the centre scale. this line crosses the right hand scale at point 5, which means that 5 parts by weight of Cobalt Octoate 10% Co has to be added to 100 parts by weight of the solid vehicle.

2. Viscosity conversion chart

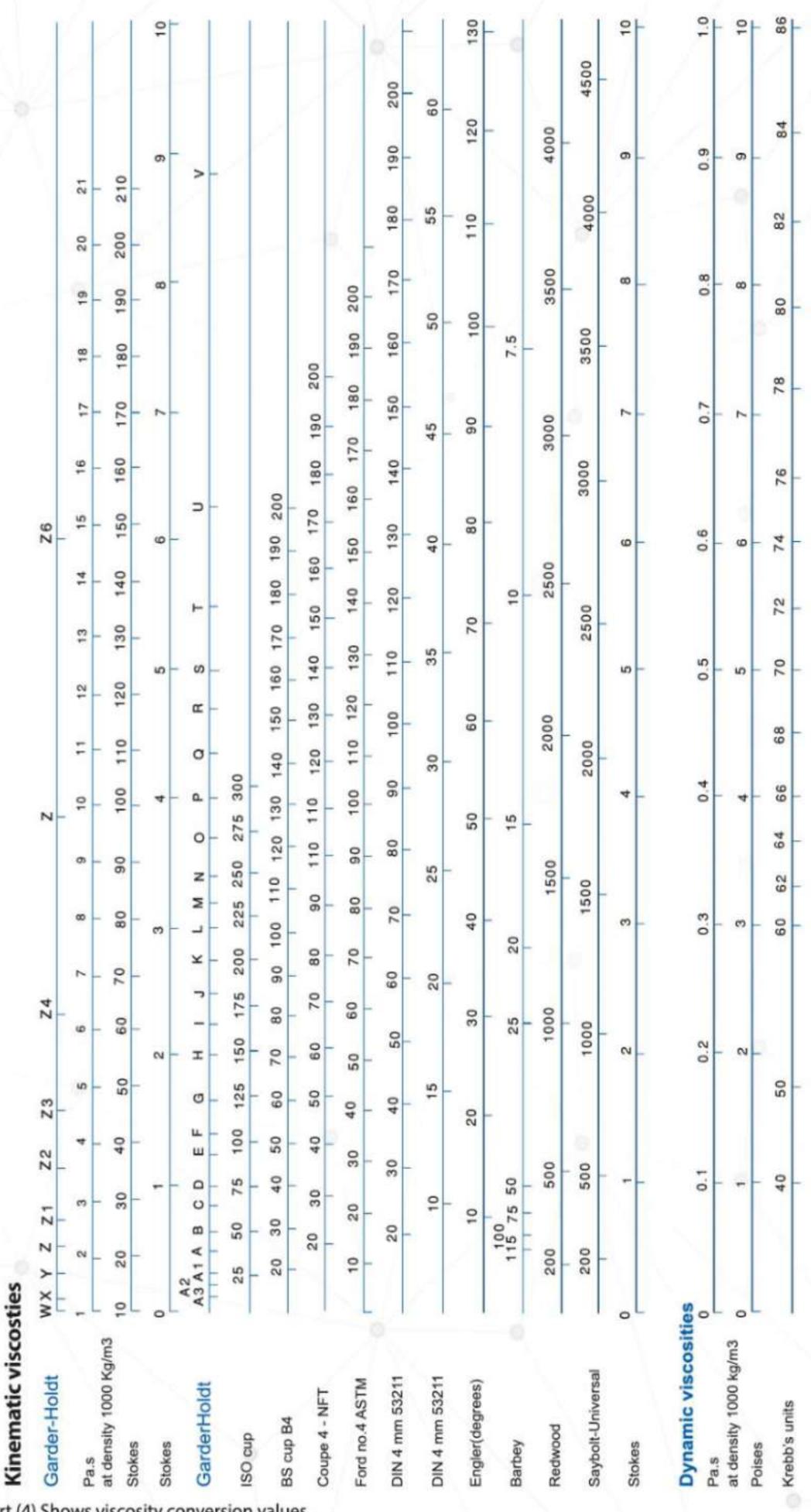
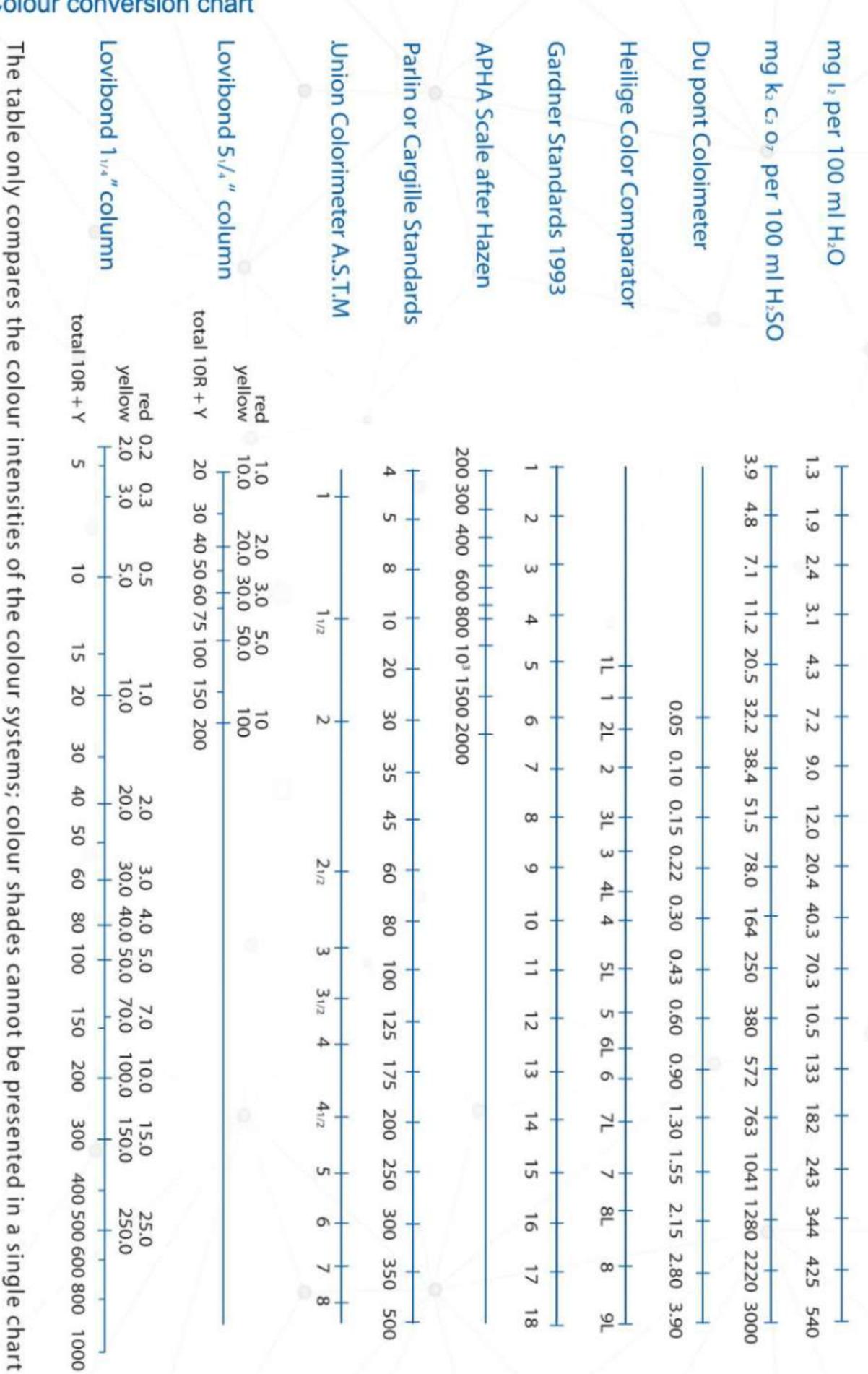


Chart (4) Shows viscosity conversion values.



VISCOSITY CONVERSIONS

(For Newtonian Fluids, @ 25 °C, °D = 1)

| Centipoises | Ford Cup 4# | Zahn 2# | Zahn 3# | Zahn 4# | Gardner Holdt | Kerbs Stormer |
|-------------|----------------|------------|------------|------------|------------------|------------------|
| 1.0 | | | | | A5- | |
| 10.0 | | 16 | | | A4- | |
| 15.0 | | 17 | | | A3- | |
| 22.0 | 14 | 19 | | | A2- | |
| 32.0 | 15 | 20 | | | A1- | |
| 50.0 | 19 | 22 | | | A | |
| 65.0 | 22 | 27 | | | В | |
| 85.0 | 27 | 34 | | | С | |
| 100.0 | 30 | 41 | 12 | | D | |
| 125.0 | 36 | 49 | 14 | 11 | E | |
| 140.0 | 40 | 58 | 16 | 13 | F | |
| 165.0 | 46 | 66 | 18 | 14 | G | |
| 200.0 | 50 | 82 | 23 | 17 | Н | 52 |
| 225.0 | 55 | | 25 | 18 | 1 | 54 |
| 250.0 | 68 | | 27 | 20 | J | 56 |
| 275.0 | 74 | | 32 | 22 | K | 59 |
| 300.0 | 81 | | 34 | 24 | L | 61 |
| 320.0 | 86 | | 36 | 25 | М | 62 |
| 340.0 | 91 | | 39 | 26 | N | 63 |
| 370.0 | 99 | | 41 | 28 | 0 | 64 |
| 400.0 | 107 | | 46 | 30 | Р | 65 |
| 435.0 | 116 | | 50 | 33 | Q | 66 |
| 470.0 | 125 | | 52 | 34 | R | 67 |
| 500.0 | 133 | | 57 | 37 | S | 68 |
| 550.0 | 146 | | 63 | 40 | Т | 69 |
| 630.0 | 167 | | 68 | 44 | U | 71 |
| 885.0 | 199 | | | 64 | ٧ | 78 |
| 1.070.0 | 270 | | | | W | 85 |
| 1.290.0 | | | | | Х | 95 |
| 1.760.0 | | | | | Υ | 100 |
| 2.270.0 | | | | | Z | 105 |
| 2.700.0 | | | | | Z1- | 114 |
| 3.620.0 | | | | | Z2- | 129 |
| 4.630.0 | | | | | Z3- | 136 |
| 6.340.0 | | | | | Z4- | |
| 9.850.0 | | | | | Z5- | |
| 14.800.0 | | | | | Z6- | |
| | | | | | | |

Table (2) Shows viscosity conversion values for newtonian fluids.

Application lab instruments

As we always stirke excellence, we have successfully fully installed our application & instrumentation labs to consist of the most recent instruments, techniques and technologies that help us providing our best service standards to our esteemed clients and partners.

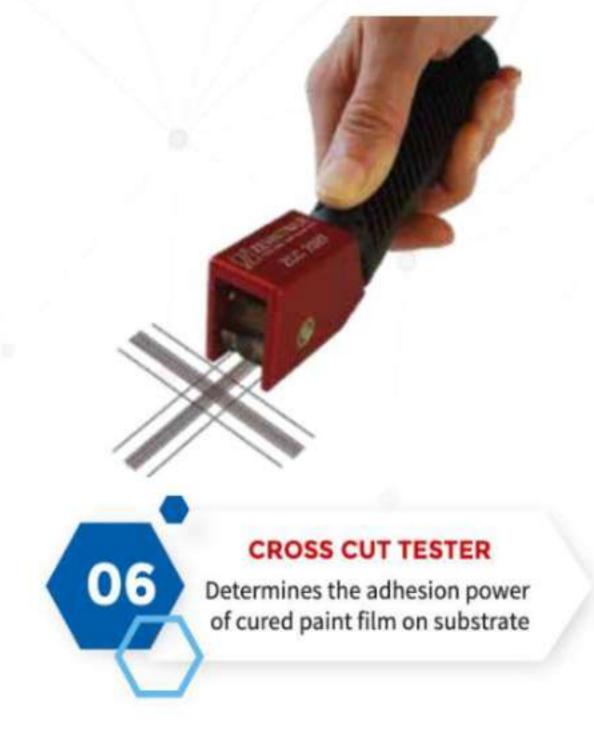
















Some of our labs instruments and its major role are listed here. And for more detailed information, please ask for a copy of Egyptian British Co. application instruments brochure.

Notes

For more inquiries and clarifications, we would be glad to receive your requests and calls to Mr. Samer Samir

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