



## **Products Catalogue**

2019 edition



























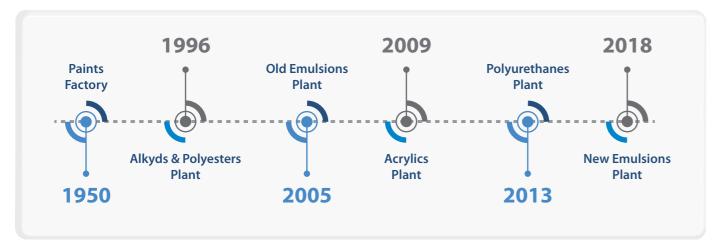
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### **Company Profile**

With its long history and tradition as a family business that started in Egypt since 1950, Eagle Chemical™ has progressively transformed itself into a major manufacturer of resins, polymers, and specialty chemicals in the Middle East. Its success over the years stems from creating sustainable, economic and tailored solutions for its industrial customers. Today, Eagle Chemicals™ products are trusted in more than 80 countries around the globe. Its wide range of products includes solvent based alkyds, acrylics, unsaturated and saturated polyesters, water based emulsions, adhesives and speciality chemicals.

### **Milestones:**



### **EAGLE CHEMICALS™ Vision:**

To be a global leader in the chemical industry providing its partners with consistent quality and added value products, services and logistics, conforming to international quality standards.

### **EAGLE CHEMICALS™** Mission:

To formulate and supply tailored solutions for its customers' needs, ensuring long term partnerships and continued success of each stakeholder, in addition to becoming a socially responsible global corporate.







OC, R&D and Application Labs

Bulk Deliveries for the Domestic Market

Solvent Based Resins Plant

### **Driving Value Creation through:**

- Striving for Operational Excellence through running fully automated production lines, batch process units and filling lines.
- Constantly adapting to customers' dynamic needs through R&D facilities and application labs, designed specifically for the diverse applications of its products such as wood, car, can, and decorative coatings, in addition to packaging adhesives, and pressure sensitive adhesives.
- Acquiring a tank farm in Adabeya Suez Port with storage capacity exceeding 12,000 m<sup>3</sup> as well as two plant tank farms 5,000 m<sup>3</sup> each.
- Multilingual in-house logistics team capable of managing transportation and complex logistics to source, store and deliver products for customers around the globe.
- Environmental protection is also the genuine commitment of EAGLE CHEMICALS™, as the safe manufacture and use of its products require dedicated care and expertise.

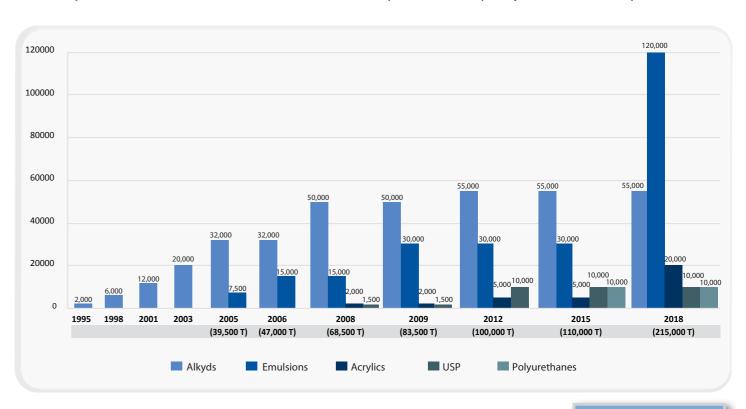
### **Certifications and Compliance:**

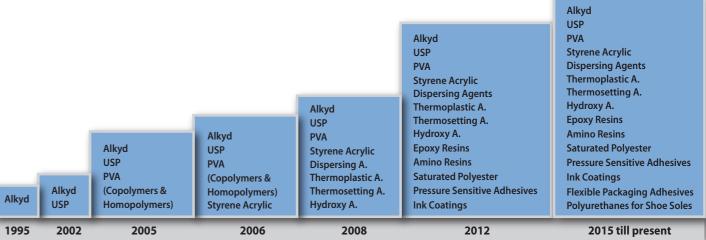
EAGLE CHEMICALS™ is proud to be:

- ISO 14001, ISO 9001, ISO 50001 and OHSAS 18001 certified around the world, and currently working on ISO 17025.
- Fully compliant with European REACH and ADR regulations.

### **Expansion of Production Capacity (Tons) and Product Range:**

EAGLE CHEMICALS™ has recently started operating phase I for one of the largest water based emulsion resins plant in the Middle East and Africa, with a total production capacity of 120,000 tons per annum.





### Alkyd Resins How To Read Our Codes?



## Kind of Resin

LA	Long oil alkyd resin	RMA	Phenolic resin and/or rosin modified alkyd resin
MA	Medium oil alkyd resin	TO	Treated oil
SDA	Short oil air drying	CA	Copolymerized alkyd resin
SNDA	Short non drying alkyd resin	MR	Maleic Resin
UO	Urethenated oil	GA	Gel Alkyd (Thixotropic)
UA	Urethenated alkyd resin		



S	Soya oil	COC	Coconut fatty acids/oil	SFF	Safflower oil
S	Sunflower oil	DC	Dehydrated castor oil	LR	Linoleic rich fatty acid
L	Linseed oil	C	Castor oil	V	Vegetable oil
T	Tall oil fatty acid	SFA	Synthetic fatty acids	TU	Tung oil
F	Fish oil	SF	Sunflower fatty acid	CN	Cashew nut

### Type of solvent

W	White Spirit (Low aromatic content)	X	Xylene
WZ	White Spirit (Zero aromatic content)	T	Toluene
		M	Different types of mixed solvents







Note: Any viscosity in mpas = viscosity in cP

Long oil alkyd resin based on Sunflower or Soya bean oil diluted in W.Spirit of oil content 61% & viscosity of 20 poise at 55% solid content.

## Alkyd Resins

- LONG OIL ALKYDS
- MEDIUM OIL ALKYDS
- URETHENATED OIL
- URETHENATED ALKYDS
- TREATED OIL
- GEL ALKYD
- SHORT OIL AIR DRYING ALKYDS
- SHORT OIL NON-DRYING ALKYDS
- COPOLYMERIZED ALKYDS
- ROSIN MODIFIED ALKYD

### LA-EAGLE (SW 61-20/55)



Product	Solid ±	1 Solvent	Type of Oil	Oil %	Type of Polyol	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance	Suggested Uses
LA-EAGLE (SW61-20/55)*	70	White Spirit	Sunflower or Soya bean	61	Penta	8 Max	Z8 @70% & Y - Z @55%	2000 @55%	5 Max	Superior grade with high viscosity, very good gloss, gloss retention, good adhesion & excellent hardness with reasonable cost	Excellent through drying that allows you to add less driers allowing you to produce very good white paints & excellent economical wood varnishes
LA-EAGLE (SW60-36/55)	70	White Spirit	Sunflower or Soya bean	60	Penta	8 Max	Z10 @70% & Z2 @55%	3600 @55%	5 Max	It's the higher viscosity version of the LA (SW61-20/55) 70% with high gloss, gloss retention, good adhesion & excellent hardness	Excellent through drying that allows you to add less driers allowing you to produce very good white paints & excellent economical wood varnishes
LA-EAGLE (SW61-9/55)	70	White Spirit	Sunflower or Soya bean	61	Penta	12 Max	Z6 @70% & V - W @55%	900 @55%	5 Max	It's the lower viscosity version of the LA (SW61-20/55) 70% with high gloss, gloss retention, good adhesion & excellent hardness	Excellent through drying that allows you to add less driers allowing you to produce very good white paints & excellent economical wood varnishes
LA-EAGLE (SW61-22/55)	70	White Spirit	Sunflower or Soya bean	61	Mixed Polyol	8 Max	Z8 @70% & Y - Z @55%	2200 @55%	5 Max	High viscosity, very good gloss, gloss retention, good adhesion and very good hardness with reasonable cost	House paint and wood varnishes
LA-EAGLE (SW61-27/55)	65 &70	White Spirit	Sunflower or Soya bean	61	Mixed Polyol	8 Max	Z1 - Z2 @55%	2700 @55%	5 Max	It's the higher viscosity version of the LA (SW61-22/55) 70% with very good gloss, gloss retention, good adhesion and very good hardness with reasonable cost	High viscosity paints and wood varnishes
LA-EAGLE (LRW60-19/55)**	70	White Spirit	Linoleic rich fatty acid	60	Mixed Polyol	12 Max	Z8 @70% & Y - Z @55%	1900 @55%	5 Max	High viscosity, very good gloss, gloss retention, good adhesion and medium hardness with economical cost	Economical high gloss house paints. Good as low grade varnish
LA-EAGLE (SW64-65/70)	70	White Spirit	Sunflower or Soya bean	64	Mixed Polyol	10 Max	Approx. Z4 @70%	6500 @70%	5 Max	Medium viscosity resin having excellent gloss, gloss retention, brushability, levelling and very good flexibility. Absorbs more water than other resins using Eagle - ES-4045 emulsifier with excellent water stability	High gloss paints and wood varnishes. DIY paints. By adding 10% of GA(THIX9/50)50%, you can use it as premier grade for DIY paints due to the improved workability
LA-EAGLE (SFW61-97/70)	70	White Spirit	Special treated sunflower fatty acids	61	Penta	8 Max	Z5 - Z6 @70%	9700 @70%	5 Max	Medium viscosity, light color, excellent yellowing resistance due to the use of special treated sunflower FA. High gloss and excellent hardness	Highly recommended for white/light colored high gloss paints, gloss enamel for indoors 8 outdoor
LA-EAGLE (SFW61-20/55)	70	White Spirit	Special grade of sunflower fatty acids	61	Penta	8 Max	Y - Z @55%	2000 @55%	5 Max	High viscosity, light color, excellent yellowing resistance due to the use of special treated Sunflower FA. High gloss and excellent hardness	Highly recommended for white colored high gloss outdoor & indoors paints
LA-EAGLE (LW66-22/70)	70	White Spirit	Linseed	66	Mixed Polyol	10 Max	Approx .Z @70%	2200 @70%	8 Max	Low viscosity, extra ordinary gloss, excellent adhesion and hardness with superior wood penetration	Colored enamels, anti corrosion primers for metals
LA-EAGLE (SW65-4/60)	75	White Spirit	Sunflower or Soya bean	65	Penta	10 Max	O - P @60%	400 @60%	5 Max	High solid with medium viscosity, high gloss, gloss retention, brushability & levelling	High build interior & exterior house paints and varnish. Special for low VOC paints
LA-EAGLE (VWZ64-9/70)	80	Zero aromatic W. Spirit (D60)	Special grade of vegetable oil	64	Penta	10 Max	U - V @70%	900 @70%	6 Max	High solid with lower viscosity, excellent gloss, gloss retention, good drying properties & hardness	Very high gloss enamels paints and low VOC paints
LA-EAGLE (SWZ68-50/75)	85	Zero aromatic W. Spirit (D60)	Sunflower or Soya bean	68	Penta	10 Max	Z3 - Z4 @75%	5000 @75%	5 Max	High solid with lower viscosity, high gloss, gloss retention, very good pigment wetting properties	Very high gloss enamels, special for low VOC paints
LA-EAGLE (SW64-5/70)	80	White Spirit	Sunflower or Soya bean	64	Penta	10 Max	V - W @70%	1000 @70%	6 Max	High solid alkyd resin, high gloss & gloss retention, very low viscosity and very good pigment wetting properties	Very high gloss enamels. Special for low VOC paints
LA-EAGLE (S68-15/100)***	100	-	Sunflower or Soya bean	68	Penta	12 Max	Z - Z2 @100%	2000 - 4000 @100%	6 Max	Ultra high solid, very low viscosity, high gloss, very good leveling, good penetration for wood and high flexibility	Wood varnishes, very low viscosity paint & high gloss finishes, wood impregnation stain and reactive diluent
LA-EAGLE (L70-170/100)***	100	-	Linseed	70	Penta	15 Max	Z6 - Z7 @100%	17000 @100%	10 Max	Isopthalic based, excellent Gloss, flowability and leveling properties. Very good flexibility and good chemical resistance	Printing inks and silk screen inks

## MEDIUM OIL ALKYDS

Product	Solid ± 1	Solvent	Type of Oil	Oil %	Type of Polyol	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance Suggested Uses
MA-EAGLE (SW50-46/55)	60	White Spirit	Sunflower or Soya bean	50	Mixed Polyol	10 Max	Z3 - Z4 @55%	4600 @55%	5 Max	Standard grade with good wetting properties. Good gloss with excellent flexibility. Adding GA-EAGLE (THIX9/50)50% will give superior workability  Enamel undercoat and topcoat for architectural paints. Work very good as economical anti-corrosion primer and matt paints
MA-EAGLE (SW50-148/55)	55	White Spirit	Sunflower or Soya bean	50	Mixed Polyol	8 Max	Approx. Z6 @55% & approx. X @45%	14800 @55%	5 Max	High viscosity, good wetting properties. Good hardness Enamel for architectural and low cost industrial paints
MA-EAGLE (SW50-10/40)	50	White Spirit	Sunflower or Soya bean	50	Mixed Polyol	10 Max	V - W @40%	1000 @40%	5 Max	Very high viscosity. Good wetting properties. Adding GA-EAGLE (THIX9/50)50% will give superior workability  Enamel for architectural and low cost industrial paints. Excellent matt paints with excellent workability
MA-EAGLE (SW45-148/45)	45	White Spirit	Sunflower or Soya bean	45	Mixed Polyol	8 Max	Approx. Z6 @45%	14800 @45%	5 Max	Extremely high viscosity with good wetting properties Enamel for architectural and low cost industrial paints
MA-EAGLE (SW48-100/50)	50	White Spirit	Sunflower or Soya bean	48	Penta	10 Max	Z5 - Z6 @50%	10000 @50%	5 Max	Excellent Hardness, good wetting properties, high viscosity, good yellowing resistance & gloss Industrial & architectural paints, white color high gloss paints
MA-EAGLE (SWX48-50/60)	60	White Spirit/ Xylene 3:1	Sunflower or Soya bean	48	Mixed Polyols	12 Max	Z3 - Z4 @60%	5000 @60%	5 Max	High gloss and gloss retention, good yellowing resistance  Car repair finishes, high quality industrial enamel & machinery coatings
MA-EAGLE (LRX48-300/75)	75	Xylene	Linoleic rich fatty acid	48	Penta	12 Max	Z7 - Z8 @75%	30000 @75%	5 Max	High solid chain stopped with very good hardness  Car repair enamels, machinery coating, drum paints and general industrial paints
MA-EAGLE (SX45-12/50)	60	Xylene	Sunflower or Soya bean	45	Penta	10 Max	V - X @50%	1200 @50%	5 Max	Extremely fast drying, excellent hardness, very good yellowing resistance and good gloss retention  Car repair enamels, machinery coating, drum paints and general industrial paints



Product	Solid ± 1	Solvent	Type of Oil	Oil %	Type of Isocyanate	Type of Polyol	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance Suggested Uses
UO-EAGLE (SW63-30/60)	60	White Spirit	Soya bean	63	Aromatic	Penta	2 Max	Approx. Z3 @60%	3000 @60%	5 Max	Light color, transparent with excellent through hardening, abrasion resistance & high gloss  Varnishes for parquet floors, furniture & boats
UO-EAGLE (SW63-100/60)	60	White Spirit	Soya bean	63	Aromatic	Penta	2 Max	Z5 - Z6 @60%	12000 : 25000 @60%	5 Max	It's the high viscosity version of the UO (SW63-30/60)60% with light color, transparent with excellent through hardening, abrasion resistance & high gloss
UO-EAGLE (LW62-20/52)	52	White Spirit	Linseed Oil	62	Aromatic	Penta	2 Max	Y - Z @52%	2000 @52%	6 Max	Extremly high hardness comparable with the 2K-PU coating systems, extremly fast drying time, very high gloss, gloss retention. Transparent with relatively light color

## URETHENATED ALKYDS

Product	Solid ± 1	Solvent	Type of Oil	Oil %	Type of Isocyanate	Type of Polyol	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance Suggested Uses
UA-EAGLE (SW63-5/50)	55	White Spirit	Soya bean	63	Aromatic	Penta	2 Max	S - T @50%	500 @50%	5 Max	Very good hardness, good compatibility with the majority of medium & long air drying alkyds with high gloss, gloss retention and fast drying time  Wood varnishes, furniture finishes, parquet sealers, yacht varnishes and color enamel high gloss, gloss retention and fast drying time
UA-EAGLE (SW61-30/55)	55	White Spirit	Soya bean	61	Aliphatic	Penta	2 Max	Z - Z2 @55%	3000 @55%	5 Max	Due to the aliphatic isocyanate's modification, this product gives outstanding weathering resistance with excellent yellowing resistance  Varnishes for exterior paint (garden furniture), yacht varnishes

### TREATED OIL

Product	Solid	Solvent	Type of Oil	Oil %	Type of Isocyanate	Type of Polyol	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance	Suggested Uses
TO-EAGLE (L100-36/100)	100	-	Linseed	100	N/A	-	15 Max	Z2 - Z3 @100%	3600 @100%	13 Max	High flexibility, very good pigment wetting properties, brushability & leveling	Ready mixed paints, improve workability & dispersion of printing inks, especially used as raw material for glass putty

## GEL ALKYD

Product	Solid ± 1	Solvent	Type of Oil	Oil %	Type of Polyol	Acid Value	Gel Strength	Color Gardner	Performance	Suggested Uses
GA-EAGLE (THIX-9/50)	50	Zero aromatic W. Spirit (D60)	Sunflower or Soya bean	54	Penta	5 - 12 Max	260 - 380 gm/cm <sup>2</sup>	8 Max	High gel strength. You can add to LOA and MOA to improve the workability	Non Sagging - non drip paints, construction paints fillers, primers & DIY coating
GA-EAGLE (THIX-9/50)	55	Zero aromatic W. Spirit (D60)	Soya Fatty acid	52	Penta	5 - 12 Max	> 400 gm/cm <sup>2</sup>	8 Max	Very high gel strength with higher solid. You can add to LOA and MOA to improve the workability	Non Sagging - non drip paints, construction paints fillers, primers & DIY coating



Product	Solid ± 1	Solvent	Type of Oil	Oil %	Type of Polyol	Acid Value	OH%	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance	Suggested Uses
SDA-EAGLE (SX35-18/50)	60	Xylene	Sunflower or Soya bean	35	Penta	12 Max	3	Y - Z @50%	1800 @50%	6 Max	High viscosity chain stopped with very fast drying time and excellent hardness	Corrosion resistance primers, air drying & stoving finishes, automotive refinishing enamels, traffic paint, wood coating (NC & 2K Sealer)
SDA-EAGLE (SX35-46/60)	60	Xylene	Sunflower or Soya bean	35	Mixed Polyol	12 Max	3	Z3 - Z4 @60%	4600 @60%	6 Max	Medium viscosity chain stopped with very fast drying time and very good hardness. Needs low quantity of NC	Corrosion resistance primers, air drying, stoving finishes, automotive refinishing enamels, wood coating (NC & 2K Sealer)
SDA-EAGLE (SFX27-25/60	60	Xylene	Soya bean fatty acid	27	Mixed Polyol	10 Max	2.2	Z - Z2 @60%	2500 @60%	5 Max	Low NCO demand - Chain stopped with fast drying time	Primers, knifing fillers, top coats and dipping paints. NC sealer & 2K top coat for wood
SDA-EAGLE (LX32-145/55)	55	Xylene	Linseed Oil	32	Penta	10 Max	3.9	Z6 @55%	14500 @55%	6 Max	Chain stopped with extremely fast drying time, through hardening, excellent corrosion resistance and excellent adhesion	Corrosion resistance primers, air drying & stoving finishes. Excellent isolating varnish & wire enamels
SDA-EAGLE (TX35-46/60)	60	Xylene	TOFA (Low rosin)	35	Penta	15 Max	1.5	Z2 - Z4 @60%	4600 @60%	6 Max	Low NCO demand, chain stopped with extremly fast drying and hardness and good yellowing resistance. Very high viscosity at low solid	High quality top coat for wood and metal industry. NC sealer & 2K top coat for wood
SDA-EAGLE (SX41-20/60)	70	Xylene	Sunflower or Soya bean	41	Mixed Polyol	12 Max	4	Y - Z @60%	2000 @60%	5 Max	Economic, multipurpose semidrying short alkyd with excellent flexibility, high gloss and good adhesion	NC and 2K wood top coatings, enamel undercoat, color stoving enamel. Primer for general industry
SDA-EAGLE (DCX39-23/60)	60	Xylene	Dehydrated Castor Oil	39	Penta	15 Max	6	Z @60%	2300 @60%	5 Max	Good hardness, scratch resistance and good adhesion	Industrial dipping enamels, stoving enamels and primers. Car refinish



Product	Solid ± 2	Solvent	Type of Oil	Oil %	Type of Polyol	Acid Value	OH%	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance	Suggested Uses
SNDA-EAGLE (COCX32-80/60)*	70	Xylene	Speical treated coconut FA	32	Mixed Polyol	10 Max	2.5	Z3 - Z4 @60%	8000 @60%	3 Max	Excellent gloss, low NCO demand, good hardness with light color	2K-PU sealer and varnish, high quality NC sealer and top coat
SNDA-EAGLE (COCX32-36/60)*	70	Xylene	Speical treated coconut FA	32	Mixed Polyol	15 Max	3.9	Z2 - Z3 @60%	3600 @60%	3 Max	It's the low viscosity version of the SNDA (COCX32-97/60) 70% with excellent combination of hardness, flexibility, excellent yellowing resistance and gloss with light color	High quality NC and 2K clear and pigmented top coat. Non yellowing baking sytstem. Excellent high gloss top coat in 2k systems
SNDA-EAGLE (COCX32-97/60)*	70	Xylene	Speical treated coconut FA	32	Mixed Polyol	8 Max	3.9	Z5 - Z6 @60%	9700 @60%	3 Max	High viscosity with excellent combination of hardness, flexibility, excellent yellowing resistance & gloss	High quality NC and 2K clear and pigmented top coat. Non yellowing baking sytstem
SNDA-EAGLE (COCX35-97/60)*	70	Xylene	Coconut oil	35	Mixed Polyol	8 Max	4	Z5 - Z6 @60%	9700 @60%	8 Max	Economic grade with high viscosity, good gloss and good mechanical performance	High quality NC and 2K pigmented top coating and baking sytstem
SNDA-EAGLE (SFAX28-6/60)	70	Xylene	Synthetic F.A.	28	Mixed Polyol	7-10	3	S - T @60%	600 @60%	3 Max	Superior resin working as multipurpose with very good durability and excellent gloss. Excellent compatibility with CAB	Stoving enamels, car body enamels, clear and pigmented polyurethane lacquers. Very high quality NC system.
SNDA-EAGLE (SFAX28-9/60)	70	Xylene	Synthetic F.A.	28	Mixed Polyol	10 Max	4.8	V - W @60%	900 @60%	3 Max	Very good durability and excellent gloss	Stoving enamels, car body enamels, Clear and pigmented polyurethane lacquers. Very high quality NC system
SNDA-EAGLE (CX41-46/60)	60	Xylene	Castor oil	41	Penta	15 Max	4	Z2 - Z4 @60%	4600 @60%	6 Max	High build film with excellent mechanical properties, scratch resistance and good sanding properties	2K high quality wood top coating and sanding sealer
SNDA-EAGLE (VX30-27/50)	55	Xylene	Vegetable fatty acids	30	Penta	10 Max	2.8	Z - Z2 @50%	2700 @50%	5 Max	Low NCO demand with excellent hardness, good sanding properties	2K and NC sanding sealer, general indystry and matt top coats. Excellent 2K matt paints

<sup>\*</sup> Available at 60%



Product	Solid ± 2	Solvent	Type of Oil	Oil %	Modifications	Type of Polyol	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance Suggested Uses
CA-EAGLE (S-SX30-46/55)**	55	Xylene	Soya bean	30	Styrene	Mixed polyols	10 Max	Z2 - Z3 @55%	4600 @55%	5 Max	Very fast surface drying time with excellent hardness and gloss & good adhesion Industrial spraying enamels, fast drying primers. Can be used for hammer finishes
CA-EAGLE (S-SX34-30/60)	60	Xylene	Soya bean	34	Styrene	Mixed polyols	12 Max	Z2 - Z3 @60%	3000 @60%	5 Max	Excellent hammer finish effect pattern with very fast drying time  High quality hammer finish pain - Fast drying anti- corroison primer
CA-EAGLE (S-SX30-25/60)	60	Xylene	Soya bean	30	Styrene	Mixed polyols	10 Max	Y - Z1 @60%	2500 @60%	5 Max	Good hammering effect with very fast surface drying time with excellent hardness, gloss and good adhesion  Hammer finishes, industrial spraying enamels and fast drying primers
CA-EAGLE (A-SX29-9/60)	60	Xylene	Soya bean	29	Acrylics	Mixed polyols	10 Max	V @60%	900 @60%	5 Max	Good yellowing resistance, fast drying time, very good hardness and adhesion Fast drying exterior/interior durable air drying coatings - Stoving Enamels
CA-EAGLE (S-LW65-4/60)	60	White Spirit	Linseed stand oil	65	Styrene		3 Max	L - S @60%	400 @60%	8 Max	The right resin for leafing aluminium effect & gold paint. Low acid value and excellent brushability Aluminium, gold & bronze paints for industrial conditions
CA-EAGLE (S-LW65-4/60)	75	White Spirit	Linseed stand oil	65	Styrene		3 Max	Z4 - Z6 @75%	8000 @75%	15 Max	The right resin for leafing aluminium effect & gold paint. Low acid value with very good hardness and excellent brushability  Aluminium, gold & bronze paints for industrial conditions



Product	Solid ± 1	Solvent	Type of Oil	Oil %	Modifications	Type of Polyol	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance	Suggested Uses
RMA-EAGLE (LTUX34-80/60)	60	Xylene	Linseed/ Tung oil	34	Phenolic/ Rosin	Penta	20 Max	Z5 - Z6 @60%	8000 @60%	9 Max	Fast drying time, good adhesion and water resistance. Excellent corrosion resistance	Air drying primers and fillers, anti-corrosive one coat system for metal

<sup>\*\*</sup> Available in HV

Saturated Polyester Resins

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SATURATED POLYESTERS

## Saturated Polyester Resins How To Read Our Codes?











Saturated polyester



Type of Saturated Polyster Resin

Thermoseting



Viscosity in Poise at the specified solid content



Type of solvent

Isophorone

Solvent Naphtha 150 ND

Butyl glycol

Xylene

Mixture of solvents



Specified solid content

Note: Any viscosity in mpas = viscosity in cP

Thermoset Saturated Polyester of viscosity 42 poise diluted in solvent Naphtha 150ND at 55% solid content



Product	Solid ± 2	Solvent	Acid Value	OH%	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color	Appearance	Performance	Suggested Uses
SP-EAGLE (TS-30X75)	75	Xylene	10 Max	3.2	Z1 - Z3 @75%	3000 @75%	5 Max	Clear	High solid, excellent flexibility, excellent gloss & build film with mirror like effect	Professional clear lacquer for wood
SP-EAGLE (TS-6M60)	60	Mixture of solvents	14 Max	2.5	S - U @60%	600 @60%	4 Max	Clear	CAB, MF compatible, good pigment wetting	Automotive base coat
SP-EAGLE (TS-5M50)	50	Mixture of solvents	N/A	2.5	N/A	350 - 650 @100 s <sup>-1</sup>	N/A	Milky	Excellent sagging resistance & flow with good drying	Automotive refinish base coat (high solid) and industrial stoving system
SP-EAGLE (TS-25X70)	70	Xylene	10 Max	3.2	Z - Z2 @70%	2500 @70%	1 Max	Clear	Excellent gloss, appearance, high flexibility, very good grindability and compatible with most types of acrylic resins	Automotive pigmented, clear coat and high quality wood coatings
SP-EAGLE (TS-140N60)	60	Solvent naptha 150	10 Max	1	Z4 - Z5 @60%	10000 @60%	2 Max	Clear	Flexibility, deep drawing & cold crush	Can coating: tube coating and white base coat
SP-EAGLE (TS-50N60)	60	Solvent naptha 150	4 - 7	2.4	Z3 - Z4 @60%	5000 @60%	3 Max	Clear	Flexibility & sterilization resistance	Can coating: white base coat for general line
SP-EAGLE (TS-25NBG50)	50	Solvent naphtha 150/ Butyl glycol 4:1	5 Max	1.2	Y - Z @50%	2500 @50%	3 Max	Clear	Good hardness, flexibility, sterilization resistance, outdoor durability and reactivity	Can coating: white base coat and overprint varnish. Coil coating: outdoor durable coatings
SP-EAGLE (TS-42N55)	55	Solvent naphtha 150	5 Max	0.8	Z2 - Z3 @55%	4200 @55%	3 Max	Clear	Good hardness, fast drying and deep drawing properties	Coil coating: domestic appliances (indoor use). Can coating: general purpose and twist off closures
SP-EAGLE (TS-55NIP50)	50	Solvent naphtha 150/ Isophorone 3:1	10 Max	0.3	Z3 - Z4 @50%	5500 @50%	5 Max	Clear	Reactivity, adhesion to aluminium, sterilization resistance and good flexibility	Can coating: Aerosol cans and collapsable tube coatings
SP-EAGLE (TS-33NBG60)	60	Solvent naphtha 150 / Butyl glycol 3:1	8 Max	1.5	Z1 - Z2 @60%	3300 @60%	3 Max	Clear	Sterilization resistance and levelling	Can coating: White base coats and general purpose coatings
SP-EAGLE (TS-30NBG65)	65	Solvent naptha 150/ Butyl glycol (3:1)	10 Max	3	Z1 - Z2 @65%	3000 @65%	3 Max	Clear	Outdoor durability with very good weathering resistance	Interior & exterior coil coating top coat
SP-EAGLE (TS-40NBG65)	65	Solvent naptha 150/ Butyl glycol (3:1)	0 - 4	1	Z2 - Z3 @65%	4000 @65%	3 Max	Clear	Super durability with excellent QUV resistance	Super durable coil coating top coats

# **Unsaturated Polyester Resins**

UNSATURATED POLYESTERS

### Unsaturated Polyester Resins How To Read Our Codes?











Kind of Resin

USP Unsaturated Polyester



Type of Use

BF Body Filler WF Wood Filler GP General Purpose

SS Solid Surface BU Buttons PIP Pipes

RS Roofing Sheets



Special Code



Specified solid content

Note: Any viscosity in mpas = viscosity in cP

Unsaturated Polyester Resin for General Purposes applications at 65% solid content



Product	Solid ± 2	Solvent	Gel Time (Min)	Cure Time (Min)	Peak Exothermic °C	Acid Value as such	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Color Gardner	Performance	Suggested Uses
USP-EAGLE (GP25-65)	61	Styrene	8 - 14	16 - 25	125 ± 10	20 Max	N - Q @61%	350 - 450	3 Max	Non-accelerated, non-thixotropic, light color and low viscosity	General purpose & glass fiber laminations
USP-EAGLE (GP20-62)	62	Styrene	8 - 14	16 - 25	170 ± 20	25 Max	Approx. G @62%	150 - 200	3 Max	Low viscosity, non accelerated, non thixotropic, light color and rigid films	Glass fiber laminates for general purpose applications
USP-EAGLE (GP30-65)	62	Styrene	5 - 10	10 - 20	190 ± 20	30 Max	Approx. G @62%	150 - 250	Hazy	Economic slight dark color with good chemical resistance	General purpose & glass fiber laminations
USP-EAGLE (GP35-55)	58	Styrene	10 - 20	25 - 40	190 ± 20	40 Max		120 - 180	Hazy - Pink	Pre-accelerated, thixotropic, very good adhesion on acrylic sheets, good wetability and low viscosity	Spray, hand lay up, glass fiber reinforced back lamination for sanitary ware
USP-EAGLE (GP180-65)	65	Styrene	8 - 12	18 - 25	150 ± 20	20 Max	L - M @65%	300 - 400	5 Max	Non accelerated, non thixotropic, excellent wetting of filler and low shrinkage	Casting application for sanitary ware
USP-EAGLE (GP60-65)	58	Styrene	15 - 20	25 - 35	190 ± 20	20 Max		250 - 350	Hazy - Pink	Pre-accelerated, thixotropic and excellent adhesion on acrylic sheet	Spray, hand lay up and glass fiber reinforced back lamination for sanitary ware
USP-EAGLE (BF40-68)	68	Styrene	3 - 6	11 - 15	110 ± 10	18 Max	N - Q @68%	350 - 450	8 Max	High flexiblity, medium reactivity and pre-accelerated	Standard & light weight body filler for cars
USP-EAGLE (BF36-62)	62	Styrene	4 - 8	14 - 18	120 ± 10	25 Max	L - Q @62%	300 - 400	8 Max	High hardness, high reactivity, good wetability, fast drying and early sandability	Standard & light weight body filler for cars
USP-EAGLE (BU130-70)	72	Styrene	3 - 5	10 - 20	160 ± 20	40 Max	Y - Z @72%	1500 - 3000	150 Max (HAZEN)	Good flexibility, high translucency, non-accelerated and non-thixotropic	Manufacture of buttons by centrifugation and casting rods procedures
USP-EAGLE (WF230-75)	75	Styrene	5 - 8	10 - 15	180 ± 20	25 Max	Y - Z @75%	Approx. 2300	3 Max	Good sanding properties and high hardness	Sanding sealer and varnish for wood
USP-EAGLE (WF161-75)	75	Styrene	8 - 12	15 - 22	160 ± 10	25 Max	X - Y @75%	Approx. 1500	5 Max	Good sanding properties, good tolerance with economic thinners	Sanding sealer and varnish for wood
USP-EAGLE (PIP50-60)	60	Styrene	10 - 12	18 - 22	190 ± 20	15 Max	N - O @60%	300 - 400	5 Max	Iso-based, high mechanical properties & high chemical resistance	Filament winding, hand lay up in pipe manufacturing
USP-EAGLE (PIP40-62)	62	Styrene	10 - 20	20 - 40	160 ± 20	20 Max	G - K @62%	300 - 400	5 Max	Ortho-based, very good mechanical properties, low viscosity, medium reactivity and good rigidity	Filament winding and hand lay up in pipe manufacturing
USP-EAGLE (RS18-65)	65	Styrene	10 - 15	20 - 25	125 ± 10	40 Max	J - L @65%	350 - 450	1 Max	High clarity, very good transparency as the refractive index of cured resin matches that of E-glass fiber	Manufacturing of roofing sheets by continuous lamination
USP-EAGLE (SS7-70)	70	Styrene	5 - 7	12 - 16	170 ± 10	20 Max	U - V @70%	700	8 Max	Amine accelerated, high rigidity, high reactivity and medium viscosity	Stopper for marble, adhesive for marble and highly filled knifing fillers
USP-EAGLE (BU130-70)  USP-EAGLE (WF230-75)  USP-EAGLE (WF161-75)  USP-EAGLE (PIP50-60)  USP-EAGLE (PIP40-62)  USP-EAGLE (RS18-65)	72 75 75 60 62 65	Styrene Styrene Styrene Styrene Styrene	3 - 5 5 - 8 8 - 12 10 - 12 10 - 20 10 - 15	10 - 20 10 - 15 15 - 22 18 - 22 20 - 40 20 - 25	$160 \pm 20$ $180 \pm 20$ $160 \pm 10$ $190 \pm 20$ $160 \pm 20$ $125 \pm 10$	40 Max 25 Max 25 Max 15 Max 20 Max	Y - Z @72%  Y - Z @75%  X - Y @75%  N - O @60%  G - K @62%  J - L @65%	1500 - 3000 Approx. 2300 Approx. 1500 300 - 400 300 - 450	150 Max (HAZEN)  3 Max  5 Max  5 Max  1 Max	Good sanding properties and high hardness  Good sanding properties, good tolerance with economic thinners  Iso-based, high mechanical properties & high chemical resistance  Ortho-based, very good mechanical properties, low viscosity, medium reactivity and good rigidity  High clarity, very good transparency as the refractive index of cured resin matches that of E-glass fiber	Manufacture of buttons by centrifugation and casting roo Sanding sealer and varnish for wood  Sanding sealer and varnish for wood  Filament winding, hand lay up in pipe manufacturing  Filament winding and hand lay up in pipe manufacturing  Manufacturing of roofing sheets by continuous laminatio

Note: - All GP & PIP can be Pre-accelerated if needed - Curing conditions of all unsaturated polyesters are available in our technical data sheet

### Acrylic Resins How To Read Our Codes?

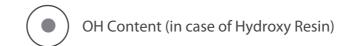


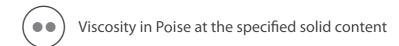


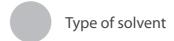
AC Acrylic Resin



OH Hydroxy
TS Thermosetting
TP Thermoplastic







X Xylene BA Butyle Acetate

M Different types of mixed solvents

Specified solid content

Note: Any viscosity in mpas = viscosity in cP

### AC-EAGLE (OH 66-28X60)

Hydroxy Acrylic Resin with OH Content 66 (2% OH) diluted in Xylene of viscocity 28 poise at 60% solid content.

Acrylic Resins

THERMOPLASTIC ACRYLICS

■ THERMOSETTING ACRYLICS

HYDROXY ACRYLICS



Product	Solid ± 2	2 Solvent	Acid Value	Viscosity @25 °C	Average Viscosity cP @25 °C	Color Hazen	OH% (per solid)	Performance	Suggested Uses
AC-EAGLE (OH33-45XBA50)	50	Butyl Acetate/Xylene	5 - 10	Z2 - Z4	4500	50 MAX	1	Very fast drying, low hydroxyl percent and very good mechanical properties. Good compatibility with NC	Very fast drying two component system for general industrial coatings
AC-EAGLE (OH33-140X60)	60	Xylene	5 -10	Z6 - Z7	18000	50 MAX	1	Excellent fast drying , early sandable, very good adhesion and mechanical properties	2K car repair primer filler, 2K economical clear coat and 2K for general industries
AC-EAGLE (OH60-20X55)	55	Xylene	5 - 10	X - Z	2000	50 MAX	1.8	Very fast drying, early sandable, good adhesion and mechanical properties	2K car repair primer filler, 2K economical clear coat and 2K for general industries
AC-EAGLE (OH60-50XM60)	60	Xylene/MPA	5 - 10	Z2 - Z4	4500	50 MAX	1.8	Good drying speed, good appearance, flexibility, good adhesion and mechanical properties	2K car repair top coats, machine lacquers and protective top coats
AC-EAGLE (OH66-28X60)	60	Xylene	5 - 10	X - Z	2000	50 MAX	2	Good mechanical and adhesion properties	Two component car repair top coat and machine lacquers
AC-EAGLE (OH66-20BA50)	50	Butyl Acetate	5 - 10	Z2 - Z4	4500	50 MAX	2	Excellent mechanical properties and good adhesion on plastic substrates. Excellent weathering and chemical resistance. Compatible with CAB	1K metallic base coat for car refinishing and 2K high quality wood coatings. Best for plastic parts in cars
AC-EAGLE (OH66-25M50)	50	Butyl Acetate/Xylene	5 - 10	Z2 - Z4	4500	50 MAX	2	Very good mechanical properties and good adhesion on plastic substrates. Good weathering and chemical resistance. Compatible with CAB	1K metallic base coat for car refinishing and 2K high quality wood coatings. Best for plastic parts in cars
AC-EAGLE (OH90-30X60)*	60	Xylene	5 - 10	Z1 - Z2	3500	50 MAX	2.7	Excellent fast drying, high gloss, good adhesion and mechanical properties	Clear and pigmented top coats for car refinishing. General industrial applications
AC-EAGLE (OH100-25BA70)	70	Butyl Acetate	5 - 10	Z - Z2	3000	50 MAX	3	High solid, high gloss, excellent mechanical properties and good outdoor durability	Pigmented top coat and clear coat for 2K automotive refinishing
AC-EAGLE (OH100-20BA65)	65	Butyl Acetate	5 - 10	X - Z	2000	50 MAX	3	Good mechanical properties, good exterior durability and appearance	Clear coat and solid color lacquer systems for vehicle refinish. Industrial top coat
AC-EAGLE (OH100-100XBA70)	70	Xylene/Butyl Acetate	5 - 10	Z4 - Z6	10000	50 MAX	3	High gloss with good appearance, good mechanical properties and good outdoor durability	Pigmented top coat and medium to high soild clear coat for 2K automotive refinishing
AC-EAGLE (OH132-20X50)	50	Xylene	4 - 12	W - Y	1500	50 MAX	4	High gloss, excellent mechanical properties and good exterior durability	High quailty low solid 2K clear coat and pigmented top coat for car refinishing
AC-EAGLE (OH138-30M60)	60	Xylene/MPA	6 - 10	Z1 - Z3	4000	50 MAX	4.2	High DOI, excellent exterior durability, good mechanical properties and chemical resistance	Clear coat and solid color topcoat for car refinish, agricultural, construction, marine and protective coatings
AC-EAGLE (OH138-40BA65)	65	Butyl Acetate	5 - 10	Z - Z3	3500	50 MAX	4.2	High gloss, excellent mechanical properties and good outdoor durability	Automotive refinishing, pigmented top coat and clear coat
AC-EAGLE (OH138-90BA70)	70	Butyl Acetate	5 - 10	Z4 - Z6	10000	50 MAX	4.2	Good exterior durability, good build, good gloss and good adhesion properties	Clear coat, solid color enamels for vehicle refinish and industrial topcoats
AC-EAGLE (OH138-50BA70)	70	Butyl Acetate	8 - 13	Z1-Z3	4000	50 MAX	4.2	Excellent gloss and DOI. Excellent mechanical properties	Automotive refinishing pigmented and clear top coat
AC-EAGLE (OH138-50BA70)**	65	Butyl Acetate	5 - 10	Z1 - Z3	4000	50 MAX	4.2	Very good gloss and DOI. Excellent mechanical properties and excellent weathering outdoor durability	Automotive refinishing pigmented and clear top coat
AC-EAGLE (OH148-30M60)	60	Xylene/Butyl Acetate /Naphtha 100	4 - 10	Z - Z2	3000	100 MAX	4.5	High gloss, excellent mechanical properties, superior outdoor stability and chemical resistance	2K systems. Automotive refinishing, top coats and clear coats
AC-EAGLE (OH148-60BA70)	70	Butyl Acetate	5 - 10	Z2 - Z4	4500	100 MAX	4.5	Excellent grinding properties, high gloss, excellent mechanical properties and chemical resistance	2K systems. Automotive refinishing, top coats and clear coats
AC-EAGLE (OH148-100BA70)	70	Butyl Acetate	5 - 10	Z3 - Z5	7000	200 MAX	4.5	Excellent gloss, DOI, excellent mechanical properties and excellent chemical resistance	2K systems. Automotive refinishing, top coats and clear coats
AC-EAGLE (OH148-27M60)	60	Butyl Acetate /Naphtha 100	5 - 10	Z - Z1	3000	50 MAX	4.5	Excellent gloss, good exterior durability and gloss retention	Industrial 2K top coats. Clearcoats for vehicle refinishes
AC-EAGLE (OH148-95BA70)	70	Butyl Acetate	5 - 10	Z4 - Z6	10000	50 MAX	4.5	High gloss, excellent mechanical properties and good outdoor durability	2K medium to high solids systems for high quality automotive refinishes

\*Available in HV

\*\* 70% is available



Product	Solid ± 2	Solvent	Acid Value	Tg °C	Viscosity @25 °C	Average Viscosity cP @25 °C	Color Hazen	Performance	Suggested Uses
AC-EAGLE (TP-60T60)	60	Toluene	5 - 10	55	Z4 - Z5	7500	50 MAX	Very fast physical drying. Very good adhesion on asphalt, very good abrasion resistance and excellent hardness	High quality road marking paints and masonary paints
AC-EAGLE (TP-60X60)	60	Xylene	5 - 10	55	Z4 - Z5	7500	50 MAX	Fast physical drying. Very good adhesion on asphalt, very good abrasion resistance and excellent hardness	High quality road marking paints and masonary paints
AC-EAGLE (TP-46X55)	55	Xylene	5 - 10	55	Z2 - Z4	4500	50 MAX	Medium viscosity, very good drying and very good adhesion on plastic substrate	General purpose masonary, decorative application and excellent for plastic substrate
AC-EAGLE (TP-98T50)*	50	Toluene	1 MAX	55	Z4 - Z6	10000	50 MAX	Outstanding exterior durability and color retention. Compatible with CAB and N.C.	Fast drying base coat and clearcoat for car refinishing
AC-EAGLE (TP-30T40)	40	Toluene	30 - 35	72	Y - Z1	2500	50 MAX	Fast physical drying, excellent hardness and sandability	1K air dry primer filler for car refinishing
AC-EAGLE (TP-46T42)	42	Toluene	1 MAX	106	Z - Z2	3500	200 MAX	Low solid, high viscosity, outstanding exterior durability and color retention. Compatible with CAB	Base coat and topcoat for 1K car refinishing
AC-EAGLE (TP-9M50)	50	Xylene/Toluene	4 MAX	82	V - X	1000	200 MAX	Grindability, compatability with different resin types as CAB	Base coat for 1K car refinishing
AC-EAGLE (TP-40W60)	60	Zero aromatic W. Spirit (D60)	5 MAX	22	Z2 - Z4	4500	100 MAX	Low Tg, good permanent flexibility and good adhesion to galvenized steel, aluminium and copper	Highly recommended low viscosity primers with very good penetration as intermediate coating over old loose paints on galvanized and stainless steel substrates. Can be used as an intermediate primer on galvanized aluminum, copper and stainless steel substrates and to be re-coated with any kind of paints on top of it
AC-EAGLE (TP-2W40)	60	Zero aromatic W. Spirit (D60)	5 MAX	50	H - L @40%	250	100 MAX	Fast drying, very good abrasion resistance, alkali and humidity resistance	Binder for cement substrates - low viscosity primers with very good penetration and recommended for stone varnishes
AC-EAGLE (TP-120X55)	55	Xylene	5 - 10	52	Approx.Z6	15000	50 MAX	Very fast solvent release, very good durability, very good adhesion and gloss	Ideal for stamped concrete & outdoor masonary paints
AC-EAGLE (TP-70T60)	60	Toluene	12 MAX	47	Z3 - Z5	7000	50 MAX	Very fast physical drying. Excellent hardness, good alkali and humidity resistance. LPG compatible	Aerosol Paints
AC-EAGLE (TP-50X60)	60	Xylene	12 MAX	47	Z1 - Z3	4000	50 MAX	Fast physical drying, excellent hardness, good alkali and humidity resistance. LPG compatible	Aerosol Paints
AC-EAGLE (TP-4BA45)**	50	Butyl Acetate	1 MAX	54	Z2 - Z4	4500	50 MAX	Aromatic free solvent with fast physical drying. LPG compatible	Aerosol Paints

## THERMOSETTING ACRYLICS

Product	Solid ± 2	Solvent	Acid Value/mg. KOH	Viscosity @25 °C	Average Viscosity cP @25 °C	Color Hazen	Performance	Suggested Uses
AC-EAGLE (TS-22M55)	58	Mixture of solvents	6 - 17	Z1 - Z3	4000	50 MAX	Good streilization resistance and balnace between hardness & flexibility	Can Coating, two piece can base coating
AC-EAGLE (TS-10XB50)	50	Xylene/n-Butanol 3:1	10 - 18	V - X	1000	150 MAX	Weathering resistance, scratch resistance, compatible with CAB and amino resins	Metallic base coat, clear and top coats for car refinishing

## **Epoxy Esters & Amino Resins**

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- EPOXY ESTER RESINS
- AMINO RESINS

### Epoxy Esters & Amino Resins How To Read Our Codes?



Kind of Resin

EE Epoxy Ester AR Amino Resin

Kind of Fatty Acid / Amino Resin

DC Dehydrated Castor Oil Fatty Acid MF Melamine formaldehyde COC Coconut Fatty Acid UF Urea formaldehyde

BF Benzoguanamine formaldehyde

Viscosity in Poise at the specified solid content

Type of solvent

X Xylene I

X Xylene I Isobutanol
N Solvent Naphtha 150 ND B Butanol
BG Butyl Glycol

Specified solid content

Note: Any viscosity in mpas = viscosity in cP

### EE-EAGLE (DC-6X50)

Epoxy Ester resin based on Dehydrated Castor Oil of viscosity 6 poise diluted in Xylene at 50% solid content



Product	Solid ±2	Solvent	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	OH%	Performance	Suggested Uses
EE-EAGLE (DC-25NBG50)	50	Solvent naphtha 150ND/Butyl glycol 4:1	4 MAX	Z - Z1 @50%	2500 @50%	4 MAX	Good flexibility, good adhesion and good hardness	Can coating: Overprint varnish Can coating: Collapsible tubes enamels
EE-EAGLE (DC-6X50)	50	Xylene	4 MAX	U - V @50%	600 @50%	4 MAX	Good adhesion, chemical resistance and good flexibility	General Industrial: Air drying and stoving primers and protective coatings Can coatings: Overprint varnishes and collapsible tube enamels Automotive: Primer and fillers
EE-EAGLE (COC-38NBG55)	55	Solvent naphtha 150ND/Butyl glycol 3:2	4 MAX	Z2 - Z3 @55%	3800 @55%	4 MAX	Yellowing resistance, good hardness and good flexibility	Can coating : Non-yellowing overprint varnish



Product	Solid ±2	2 Solvent	Acid Value	Viscosity Gardner @25 °C	Viscosity cP @25 °C	Free Formaldehyde%	Color Hazen	Appearance	Performance	Suggested Uses
AR-EAGLE (MF-8IX55)	55	Isobutanol/ Xylene 10/1	1.5 MAX	U - V @55%	800 @55%	0.7	100 MAX	Clear	Reactivity, compatibility and overbake resistance	Stoving enamels general purpose Automotive: primers and top coats
AR-EAGLE (MF-110B70)	70	Butanol	1 MAX	Z5 @70%	11000 @70%	0.8	100 MAX	Clear	Outdoor durability, flow and reactivity	Automotive: top coats and clear coats General industry: stoving enamels
AR-EAGLE (MF-140B85)	85	Butanol	1.5 MAX	Z5 - Z6 @85%	14000 @85%	0.3	100 MAX	Clear	High solids content, good gloss level and compatibility	Can coating: exterior coatings Coil coating: low PMT curing Automotive: top coats and clear coats
AR-EAGLE (BF-160NB77)	77	Solvent Naphtha 150ND /n-Butanol 2:1	2 MAX	Z6 @77%	16000 @77%	0.5	100 MAX	Clear	Mechanical properties, sterilisation resistance and low/medium reactivity	Can coating interior and exterior
AR-EAGLE (BF-5B70)	70	Butanol	2 MAX	S @70%	500 @70%	0.7	100 MAX	Clear	Sterilisation resistance, reactivity and mechanical properties	Can coating: interior and exterior Automotive: primer surfacers
AR-EAGLE (UF-6BX63)	63	Butanol/Xylene 2:1	3 MAX	T - U @63%	600 @63%	-	100 MAX	Clear/Hazy	Compatibility with epoxy resins and sterilisation resistance	Can coating: exterior and interior coatings General industrial: acid curing and stoving enamels

## Water Based Emulsion Resins

- STYRENE ACRYLICS
- PURE ACRYLICS
- COPOLYMERS
- TERPOLYMERS
- HOMOPOLYMERS
- EAGACRYLS
- SPECIAL BINDERS FOR INDUSTRIAL APPLICATIONS

**Pressure Sensitive Adhesives** 

Lamination

**Textiles** 

**Dispersing Agents** 

Fire Guard

### Water Based Emulsion Resins How To Read Our Codes?



Kind of Resin

H Homopolymers C Copolymers

HT Homopolymers for Textiles CT Copolymers for Textiles
D Dispersing Agents DC Dispersing Agents for Ceramics

Type of Monomers / Salts

VV Vam Versatate SA Styrene Acrylic VA Vam Acrylic Acid Ester PA Acrylic Acid Ester

VVA Vam, Versatate & Acrylic Ester VM Vinyl Acetate Maleinate ester

(Terpolymer) SS Sodium Salt

Viscosity in Poise at the specified solid content

Specified solid content

Note: Any viscosity in mpas = viscosity in cP

### C-EAGLE (VV36/50)

Copolymer emulsion resin based on Vam Versatate of viscocity 36 poise at 50% solid content.

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Product	Solid	Composition	Mean Particle Size in µm	PH @23 °C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
C-EAGLE (SA5/46)	46 ± 1	Styrene acrylic	0.06	7.5 - 9	1.04 Kg/L	1000 - 3000	20	Exterior and interior paints, medium to high PVC paints, cementious coatings, sheen paints, water base sealers and saturators. APEO free	High scrub resistance
C-EAGLE (SA72/50)°	50 ± 1	Styrene acrylic	0.06	7.5 - 9	1.04 Kg/L	4000 - 8000	20	Very fine particle size to give excellent & extremely high scrub resistance (over 3000 cyles @8% binder content). Low dirt retention exterior and interior paints, medium to high PVC paints, cementious coatings, water base sealers and saturators. (Due to its very fine particle, it needs good water wettability). APEO free	Ultra high scrub resistance in HPVC paints
C-EAGLE (SA62/50)	50 ± 1	Styrene acrylic	0.06	7.5 - 9	1.04 Kg/L	4000 - 8000	18	Excellent scrub resistance at low binder content (3 times better than competitors). Exterior and interior, high filled thick coatings. It is the modified grade of C-Eagle (SA72/50)50% to work smoothly with any type of water @high PVC paints. APEO free	Stable viscosity in HPVC paints if water has higher metal content
C-EAGLE (SA85/50)* <sup>◊</sup>	50 ± 1	Styrene acrylic	0.06	7.5 - 9	1.04 Kg/L	4000 - 8000	17	Interior paints having high gloss, low dirt retention exterior and interior paints, low to high PVC paints, cementious coatings, water based sealers and saturators. APEO free	Glossy coatings
C-EAGLE (SA70/50)	50 ± 1	Styrene acrylic	0.1	7 - 8.5	1.04 Kg/L	4000 - 8000	17	Cementious coatings, water based sealers and saturators. APEO free	Excellent color tinting bases. High freeze - thaw stability
C-EAGLE (SA65/50)	50 ± 1	Styrene acrylic	0.1	7.5 - 9.5	1.01 Kg/L	4000 - 8000	5	Flexible coatings, crack bridging systems, roof coating, resin bound plasters and textured coatings, silicate paints and silicate plasters. APEO free	Elastomeric with high elongation
C-EAGLE (SA27/50)	50 ± 1	Styrene acrylic	0.06	7.5 - 9.5	1.04 Kg/L	2000 - 4000	2	Elastomeric polymer, crack bridging systems, roof coating, resin bound plasters and textured coatings. APEO free	Excellent dirt pick up resistance, water resistance and high tensile strength. Stable in extreme weather conditions



Product	Solid	Composition	Mean Particle Size in µm	PH @23 °C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
C-EAGLE (PA15/50)	50 ± 1	Pure acrylic	0.06	8 - 9	1.06 Kg/L	500 - 2000	17	Sheen paints, cementious coatings, decorative plasters, interior paints at wide PVC rate and top coatings. APEO free	High gloss paints, excellent color compatability in deep shade colors
C-EAGLE (PA16/50) <sup>0</sup>	50 ± 1	Pure acrylic	0.07	8 - 9	1.06 Kg/L	< 500	18	Excellent water resistance, excellent resistance to hydrolysis on masonry, excellent scrub resistance, excellent wet and dry adhesion to aged alkyd paints, masonry, wood, metal substrates and excellent response to rheology modifiers. APEO free	Excellent long term durability for exterior coatings
C-EAGLE (PA17/50)	50 ± 1	Pure acrylic	0.06	7 - 9	1.05 Kg/L	500 - 2000	16	High dirt pick up resistance sheen paints for exterior and interior coatings.  APEO free	High dirt pick up resistance, excellent resistance towards UV radiation with very high heat stability
C-EAGLE (PA7/45)°	45 ± 1	Pure acrylic	0.06	8 - 9	1.04 Kg/L	50 - 500	1	Modified acrylic copolymer emulsion with excellent water resistance use for wood coatings, decorative paints, industrial coatings, parquet lacquers, metal and plastic top coats. APEO free	Excellent water resistance, high block resistance and non water whitening effect
C-EAGLE (PA43/56)	56 ± 2	Pure acrylic	0.1	7 - 9	1.03 Kg/L	500 - 4000	2	Cement additive, joint fillers and sealing compounds with good adhesion to a wide variety of substrates. APEO free	Excellent flowability/Cement compatibility

\* Available in LV

<sup>0</sup> Can be supplied as Green (Eco label)



Product	Solid	Composition	Mean Particle Size in µm	PH @23 °C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
C-EAGLE (VV50/55)	55 ± 1	Vam versatate	0.16	4 - 5	1.07 Kg/L	4000 - 6000	14	Good quality exterior & interior coatings with long term durability and flexibilty	High Sheen
C-EAGLE (VV19/55)	55 ± 1	Vam versatate	0.14	4 - 5	1.06 Kg/L	3000 - 6000	14	It has low water uptake, high flexibility, excellent pigment binding properties, which makes it suitable for top quality high to low PVC paints. It's recommended for the formulation of exterior decorative paints. APEO free	High alkali resitance with long term durability
C-EAGLE (VV40/50) <sup>0</sup>	50 ± 1	Vam versatate	0.2	4 - 5	1.05 Kg/L	2000 - 6000	5	High mechanical stability makes it suitable in the formulation of smooth and sand textured coatings, emulsion putties and other coatings. Excellent gloss in silk, gloss and semi gloss paints. Good washability in a wide PVC range. APEO free	Economic, high sheen, excellent workability for putty and textured coatings
C-EAGLE (VV20/50)** <sup>0</sup>	50 ± 1	Vam versatate	0.17	4 - 5	1.06 Kg/L	2000 - 4000	14	Silk paints, sheen paints, deep shade paints, roof paints, etch primers. Used in both exterior, interior paints and textured coatings	High sheen with long term durability
C-EAGLE (VV44/50)	50 ± 1	Vam versatate	0.25	4 - 5	1.06 Kg/L	4000 - 8000	5	Gloss paints, sheen paints, deep shade paints, roof paints, etch primers. Used for both exterior and interior paints and textured coatings. Designed to offer very high pigment binding power in a wide PVC range. APEO free	High opacity and high scrub resistance
C-EAGLE (VV36/50)	50 ± 1	Vam versatate	0.18	4 - 5	1.04 Kg/L	3000 - 6000	14	Good pigment binding characteristic in a wide PVC range for matt, vinyl silk decorative paints and UV resistant exterior paints. Excellent color compatability, APEO free	Excellent color tinting bases. High gloss
C-EAGLE (VV60/50)	50 ± 1	Vam versatate	0.15	4 - 5	1.04 Kg/L	4000 - 8000	5	Gloss paints, sheen paints and deep shade paints. Used for both exterior and interior paints and textured coatings. Confers high pigment binding power in a wide PVC range. APEO free	Thixtropic, high gloss and viscosity
C-EAGLE (VA51/58)	58 ± 1	Vinyl acrylic acid ester	0.2	4 - 6	1.06 Kg/L	2000 - 6000	10	Suitable for most interior coatings from flat to semi gloss, textured coatings, primers and plasters. Good scrub resistance coatings with good outdoor durability. APEO free	Economic high solid for semi gloss paints
C-EAGLE (VA33/55)	55 ± 1	Vinyl acrylic acid ester	0.2	4 - 5	1.06 Kg/L	2000 - 6000	10	Interior coatings from flat to semi gloss, textured coatings, primers and plasters. APEO free	Economic, flat to glossy and textured coatings
C-EAGLE (VA10/51)	50 ± 1	Vinyl acrylic acid ester	0.2	4 - 5	1.08 Kg/L	500 - 2000	10	Sheen paints, deep shade paints, exterior paints and textured coatings with good flexibility and durability.	Economic multipurpose coatings
C-EAGLE (VM86/55)	55 ± 1	Vinyl acetate maleinate ester	0.18	4 - 5	1.08 Kg/L	6000 - 10000	9	It's suitable in the formulation of water based paints, smooth and sand textured coatings, emulsion putties and other coatings where the dispersion may be introduced at let down and mill base stages	High mechanical stability, textured coatings and putties



Product	Solid	Composition	Mean Particle Size in µm	PH @23 °C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
C-EAGLE (VVA28/55)°	55 ± 1	Terpolymer	0.26	4 - 5	1.05 Kg/L	1000 - 3000	12	Thick coatings, silk or gloss paints, sheen paints, deep shade paints, roof paints and etch primers. Due to the excellent combination of selected monomers ratio, we highly recommend this product to replace the pure acrylic for outdoors. Both exterior and interior paints and textured coatings with high scrub resistance in high PVC paints. APEO free	Excellent UV resistance, high solid with very high gloss and scrub resistance
C-EAGLE(VVA25/50)	50 ± 1	Terpolymer	0.2	4 - 5	1.05 Kg/L	500 - 3000	12	Durable gloss paints, sheen paints, deep shade paints, roof paints. Highly recommended for medium to high PVC paints with high scrub resistance. Used in both exterior and interior paints and textured coatings. Due to the excellent combination of selected monomers ratio, we highly recommend this product to replace the pure acrylic for outdoor	Excellent UV resistance, economic, high scrub resistance and good sheen
C-EAGLE (VVA23/50)°	50 ± 1	Terpolymer	0.2	4 - 5	1.05 Kg/L	1000 - 3000	12	Gloss paints, sheen paints, deep shade paints, roof paints and etch primers. Used in both exterior and interior paints and textured coatings. Good pigment binding power in a wide PVC range	Economic, high scrub resistance and good sheen

<sup>\*\*</sup> Available as C4 (MFFT = 4°C)

<sup>&</sup>lt;sup>0</sup> Can be supplied as Green (Eco label)



			Maan						
Product	Solid	Composition	Mean Particle Size in µm	PH @23 °C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
H-EAGLE (360/60)	60 ± 1	Poly vinyl acetate	0.47	4 - 6	1.1 Kg/L	25000 - 40000	15	Fast setting wood glues, paper adhesives, fast setting machine applied adhesive and cigarette	High solid content with fast setting applications
HP-EAGLE (355/54)	54 ± 1	Plasticized poly vinyl acetate	0.4	3 - 4	1.05 Kg/L	30000 ± 10000	0	Paper adhesives, adhesives for book binding and clear film	Paper adhesives
H-EAGLE (120/50)	50 ± 1	Poly vinyl acetate	0.25	2.8 - 3.6	1.08 Kg/L	9000 - 15000	4	D3-type adhesive in accordance with DIN EN-204. Water resistant wood glues and paper adhesives, suitable for the short contact lamination of panels with formica finishing and for post forming finishes of panel edges and profiles	D3 and D4 type adhesive for exterior applications
H-EAGLE (180/50)	50 ± 1	Poly vinyl acetate	0.3	6 - 8	1.07 Kg/L	12000 - 24000	3	Due to the very fine particle size, we highly recommend it for hard wood adhesives. Suitable for the manufacture of fast setting wood glues and joinery corpus laminations	Fast setting glues
H-EAGLE (400/50)	50 ± 1	Poly vinyl acetate	0.6	4 - 5	1.07 Kg/L	40000 ± 10000	15	Emulsion putty, high heat resistant fast setting wood glues, edge bonding and laminations of formica to chip board and joinery glues	Emulsion putty & heat resistance adhesive
H-EAGLE (850/50)	50 ± 2	Poly vinyl acetate	0.4	3 - 5	1.07 Kg/L	85000 - 110000	11	Water resistant general purpose wood glues, paper adhesives, floor, wall and ceiling adhesives. Suitable for emulsion putty	Excellent water resistant adhesives
H-EAGLE (510/50)	50 ± 1	Poly vinyl acetate	0.5	4 - 6	1.06 Kg/L	60000 ± 10000	13	Wood glues, paper adhesives, floor, wall and ceiling adhesives. Suitable for the manufacture of wood glues for hard wood	Hard wood adhesives
HP-EAGLE (950/50)*	50 ± 1	Plasticized poly vinyl acetate	0.4	4 - 7	1.07 Kg/L	90000 - 110000	5	Economic wood glues, paper adhesives, floor, wall and ceiling adhesives, ready to use adhesive with high viscosity and clear film	Economic wood glues
HP-EAGLE (900/45)	45 ± 1	Plasticized poly vinyl acetate	0.3	3 - 5	1.06 Kg/L	90000 - 110000	5	Economic wood glues, paper adhesives, floor, wall and ceiling adhesives, ready to use adhesive with high viscosity and clear film	High viscocity ready to use glue
H-EAGLE (310/40)	40 ± 1	Poly vinyl acetate	0.4	3 - 5	1.03 Kg/L	20000 - 50000	15	Wood glues, paper adhesives, floor, wall and ceiling adhesives, ready to use adhesives with medium viscosity and clear film	Ready to use glue



Product	Solid	Composition	Mean Particle Size in µm	PH @23 °C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
EAGACRYL-6050°	50 ± 1	Synthetic acrylic latex	0.06	9 - 11	1.03 Kg/L	≤ 500	7	Promotes a non yellowing appearance after many time of outdoor UV radiation, tracking resistance, early wash-off resistance with good dirt pick-up resistance. APEO free	Water borne road marking applications
EAGACRYL-121°	45 ± 1	Synthetic acrylic latex	0.08	6 - 8	1.05 Kg/L	≤ 500	29	Wood finishes for both forced and ambient drying conditions in combination with urethane dispersions in parquet lacquers, topcoats on primed various substrates. APEO free	Self cross-linking binder for wood coatings
EAGACRYL-162°	40 ± 1	Synthetic styrene/ acrylic latex	0.08	8.5 - 9.5	1.04 Kg/L	≤ 300	25	Clear coats for metal, combined with polyurethane dispersions to optimize mechanical surface properties, metal finishes and primers. APEO free	Metal anti-corrosion and DTM applications
EAGACRYL-50°	42 ± 1	Synthetic acrylic latex	0.07	6 - 8	1.04 Kg/L	≤ 200	35	Parquet lacquers blended with urethane dispersions. Recommended to improve abrasion resistance, yellowing resistance, adhesion to plastics, cardboard and good UV resistance. APEO free	Sealer and general wood coating applications

<sup>\*</sup> Available in LV

<sup>◊</sup> Can be supplied as Green (Eco label)



Product	Solid	Composition	Mean Particle Size in µm	PH @23°C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
Pressure Sensitive	Adhesives								
EAGATAPE-56	56 ± 1	Acrylic acid ester	0.2	7.5 - 8.5	1.03 Kg/L	100 - 300	0	Pressure sensitive adhesive that confers excellent adhesion power for polypropylene carton sealing tapes, low noise packaging tapes, printed tapes, consumer tapes, aluminum tapes, book covers and strapping tapes	Ready to use low noise PSA for tapes indus
EAGAPROTECT-30	56 ± 1	Acrylic acid ester	0.2	7.5 - 8.5	1.03 Kg/L	100 - 400	0	Pressure sensitive adhesive for protective film applications. It's suitable for different substrates like wood, stainless steel and PVC	Ready to use low noise PSA for surfaces protection applications
EAGASTICK-55	55 ± 2	Acrylic acid ester	0.2	7.5 - 8.5	1.03 Kg/L	400 - 1200	0	Pressure sensitive acrylic emulsion latex with unique balance between peel, shear strength and tack for low noise stickers and filmic labels on several substrates	Ready to use low noise PSA for labels and stickers industry
Lamination									
C-EAGLE (VM150/56)	56 ± 1	Vinyl acetate maleinate ester	0.4	3 - 5	1.05 Kg/L	10000 - 20000	0	Paper adhesives, laminations, floor, wall and ceiling adhesives, PVC films, PU foams, polystyrene wall plates and cellulosic films	Porous/non porous substrates adhesives
Textiles									
CT-EAGLE (VA40/40)	40 ± 2	Vinyl acrylic acid ester	0.1	5 - 6	1.03 Kg/L	< 200	12	Binder for pigment printing on all types of fiber. It produces prints with particularly soft handle, very good all round fastness properties and excellent resistance to mechanical strain	Excellent pigment compatability for textile printing
HT-EAGLE (320/50)	50 ± 1	Poly vinyl acetate	0.5	3 - 4	1.07 Kg/L	30000 ± 10000	15	Binder and coating agent for non woven, needle felts, carpets and adhesive for industrial applications	Stiffening agent for textile industry
Dispersing Agents									
DC-EAGLE (SS2/45)	45 ± 2	Sodium salt of polyacrylic acid	N/A	8 - 10	1.29 Kg/L	≤ 500	N/A	Imparts high wetting /sequestering properties into the deflocculating agent, thus offering enhanced pigment /mineral grinding, resulting into low viscosity slurry	Dispersing agent for ceramics industry applications
D-EAGLE (SS44/45)	45 ± 2	Sodium salt of polyacrylic acid	N/A	7.5 - 9	1.29 Kg/L	≤ 400	N/A	Homopolymer polyacrylic acid sodium salt with low molecular weight for detergent industry applications	Dispersing agent for industrial /institutional detergents applications
D-EAGLE (SS15/40)	40 ± 2	Maleic / Acrylic acid copolymer, Na-salt	N/A	6 - 9	1.25 Kg/L	1000 - 4000	N/A	Very versatile dispersing agent, stabilizing and protective colloid action on finely divided organic and inorganic solids in aqueous media and in mixtures of water and organic solvents	Dispersing agent for industrial /institutional detergents and texile applications
Fire Guard									
EAGLE FIREGURD 55	55 ± 1	Vam versatate	0.16	4 - 5	1.06 Kg/L	2000 - 6000	14	Recommended for intumescent fire retardant coatings (IT-FRC) with excellent compatibility with formulation ingredients. Used for gloss paints, sheen paints, deep shade paints, roof paints and textured coatings. APEO free	High solid alkali resistance, high elasticity fo intumescent fire retardant coatings
EAGLE FIREGURD 50	50 ± 1	Vam versatate	0.18	4 - 5	1.06 Kg/L	3000 - 6000	5	Silk paints, sheen paints, deep shade paints, roof paints and etch primers. Used for both exterior and interior paints and textured coatings.  Recommended for intumescent fire retardant coatings (IT-FRC)	Alkali resistance and high elasticity

### Special Additives for Coatings How To Read Our Codes?



# **Special Additives for Coatings**

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SPECIAL ADDITIVES FOR COATINGS

Dispersing Agents
Acrylic Thickeners
Formaldehyde Scavenger
Alkyd Emulsifier
Wax Dispersion

	Kind o	f Resin		
	WD	Wetting / Dispersing Agents		
	Туре	of Salt		
	SS	Sodium Salt	AS	Ammonium Salt
	Viscos	ity in Poise at the specified solid	content	:
••	Active	content		
Note: A	ny viscosi	ty in mpas = viscosity in cP		

WD-EAGLE (AS4/40)

Wetting dispersing agent based on ammonium salt at 40% solid content.



Product	Active Content	Composition	Mean Particle Size in µm	PH @23 °C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
Dispersing Agents	5								
WD-EAGLE (AS4/40)	40 ± 2	Ammonium salt of polyacrylic acid	N/A	7.5 – 9	1.20 Kg/L	≤ 400	N/A	Wetting and dispersing agent for inorganic pigments and fillers in aqueous systems for stabilizing emulsion paints	Wetting and dispersing agent for emulsion paints and coatings
WD-EAGLE (SS4/40)	40 ± 2	Sodium salt of polyacrylic acid	N/A	7.5 – 9	1.30 Kg/L	≤ 400	N/A	Wetting and dispersing agent for inorganic pigments and fillers in aqueous systems for stabilizing emulsion paints	Wetting and dispersing agent for emulsion paints and coatings
Product	Solid	Composition	Mean Particle Size in µm	PH @23 °C	Density @23 °C	Viscosity cP @23 °C	MFFT±1 °C	Application	Special Features
Acrylic Thickeners	S								
EAGAHASE-LS 001	29 ± 1	Synthetic all acrylic thickener	0.07	1.8 – 3.5	1.05 Kg/L	≤ 100	N/A	Gives a clear and viscous solutions when it's diluted with water and neutralized with a base. Effective in improving low shear rate viscosity, resulting in paints that have highly shear thinning characteristics. Compatible with soaps, synthetic detergents and dispersing agents	Rheology modifier and thickener for severapplications
EAGAHASE-HS 095	29 ± 1	Synthetic all acrylic thickener	0.07	1.8 – 3.5	1.05 Kg/L	≤ 100	N/A	Gives a clear and viscous solutions when it's diluted with water and neutralized with a base. Effective in improving low shear rate viscosity, resulting in paints that have highly shear thinning characteristics. Compatible with soaps, synthetic detergents and dispersing agents	Rheology modifier and thickener for seve applications
Formaldehyde Sc	avenger								
EAGAGREEN FS-20	20 ± 2	Formaldehyde scavenger	N/A	9 - 11	1.03 Kg/L	≤ 100	N/A	Highly effective scavenger for all volatile aldehydes, especially formaldehyde. Used in all emulsion polymers' types	Formaldehyde scavenger
Alkyd Emulsifier									
ES-EAGLE4045	45 ± 2	Emulsifying resin for solvent base systems	N/A	7.5 – 9	1.25 Kg/L	200 - 600	N/A	High molecular weight liquid resin with excellent emulsifying action (have hydrophilic head (water lover) and hydrophobic tail (alkyd or oil lover) to form steric stable colloidal suspension.	Emulsifying resin for solvent base system
Product	Solid ± 0.8	Solvent Composi	ition Me	Iting point (wax cont	tent)	Particle size (Hegman)		Application	Special Features
Wax Dispersion									
EAGAWAX 265	6.5	Xylene/butyl acetate/N-butanol		105 °C		20 μm		Improves the orientation of effect pigments, enhances the flip-flop effect. Short wave defects are minimized and leveling of the subsequent clear coat layer is improved. Settling in the container is also reduced	Solvent borne metallic base coats for automotive refinishes

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

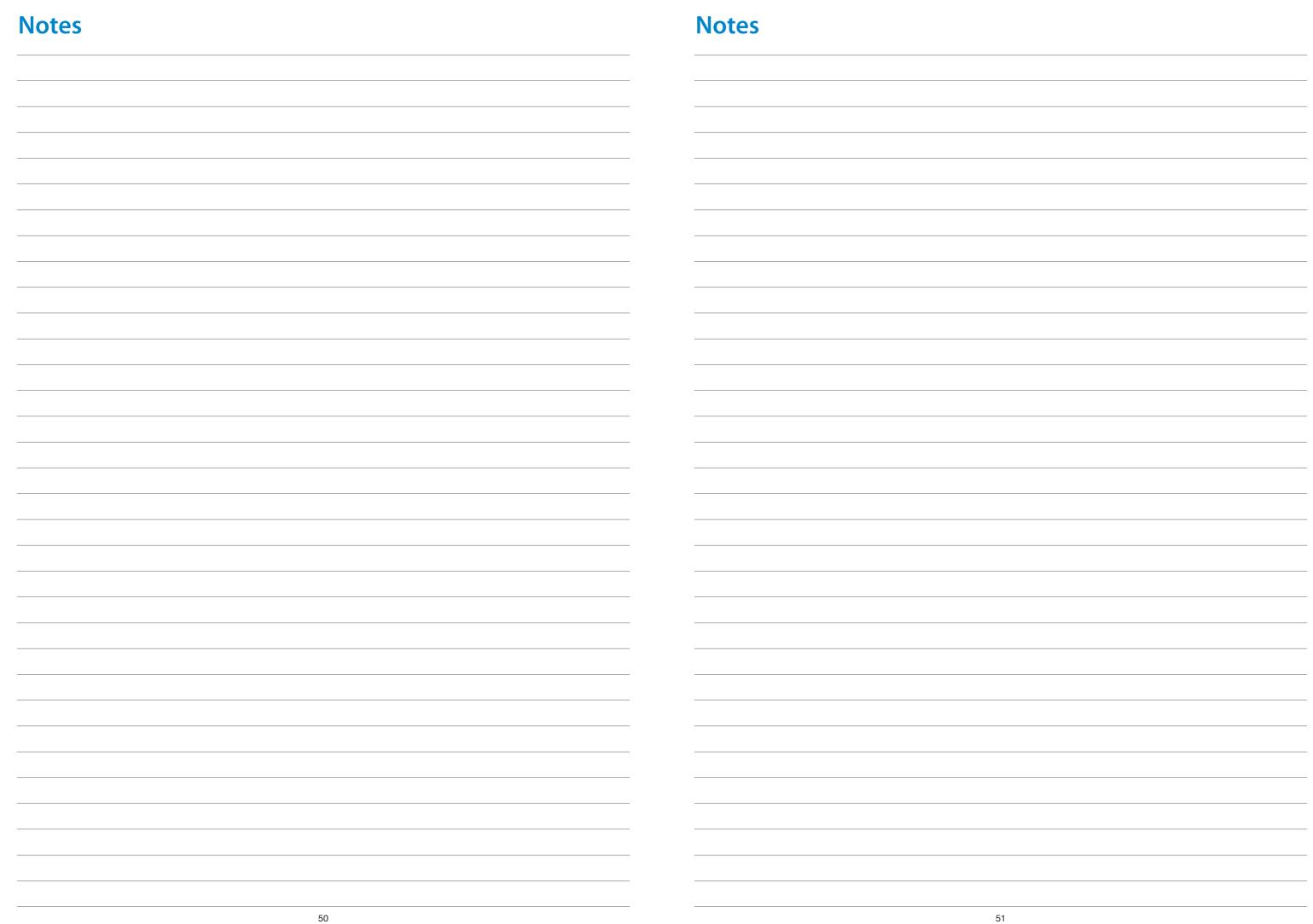
Centipoises	Ford Cup #4	Zahn #2	Zahn #3	Zahn #4	Gardner Holdt	Kerbs Stormer
1.0					A-5	
10.0		16			A-4	
15.0		17			A-3	
22.0	14	19			A-2	
32.0	15	20			A-1	
50.0	19	22			Α	
65.0	22	27			В	
85.0	27	34			C	
100.0	30	41	12		D	
125.0	36	49	14	11	E	
140.0	40	58	16	13	F	
165.0	46	66	18	14	G	
200.0	50	82	23	17	Н	52
225.0	55		25	18	I	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	T	69
630.0	167		68	44	U	71
885.0	199			64	V	78
1.070.0	270				W	85
1.290.0					Χ	95
1.760.0					Υ	100
2.270.0					Z	105
2.700.0					Z-1	114
3.620.0					Z-2	129
4.630.0					Z-3	136
6.340.0					Z-4	
9.850.0					Z-5	
14.800.0					Z-6	

Kinematic viscosties	sties																					
Gardner-Holdt	WX Y Z	Z1 Z2	2 Z3		Z4				Z					9Z								
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ISO cup	25 50	75	100 12	125 150	175	200	225 29	250 275	5 300											-		
BS cup B4	20 30	40	50 60	02	80	90 100	0 110	120	130	140 150	0 160	170	180	190 200								
Coupe 4 - NFT	20	30	40 50	09 0	20	80	06	110	110	120 130	140	150	160	170	180	190	200					
Ford no.4 ASTM	- 우	20 30	- 04 -	20	- 09	- 02	- 8	- 06	- 400	110	120 130	-	140 -	150 16	160 170	0 180	190	200	-			
DIN 4 mm 53211	20	30	40		50 6	09	70	80	06	100	110		120	130	140	150	160	170	180	190	200	
DIN 6mm 53211		9	-	15	8	20	"	25		30	ю	35		40		45		50	55		09	
Engler(degrees)		. 01	20		30		40	. 2	20	. 60		70		80		. 06		100	110		120	130
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Redwood	200	500			1 1000	_	1500	00		2000			l 2500		ຄ	3000	_	3500		40	4000	
Saybolt-Universal	200	500		10	1000		1500		CA	2000		2500	-		3000		3500	-	4000	00	4500	0
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ra.s at density 1000 kg/m3				- 2			3 –		- 4		- 2			- 9		- 2		- &		– б		- 6
Poises Krebb 's units		- 40		50		9	60 62	64	99	89	70		72	- 44	92	- '`[	78	- 08 -	82	-	84	86

systems; colour shades cannot be presented in a single chart only The table

### Temperature Conversion °C = 5/9 (°F - 32) °F = 9/5 (°C) + 32

	°C → °F °C ← °F			°C → °F °C ← °F			°C → °F °C ← °F		: : : :	°C → °F °C ← °F		: : : :	°C → °F °C ← °F	
-22.3	-10	14.0	-4.4	24	75.2	13.9	57	134.6	32.2	90	194.0	160	320	608
-22.2	-8	17.6	-3.9	25	77.0	32.8	91	195.8	32.8	91	195.8	166	330	626
-21.7	-7	19.4	-3.3	26	78.8	15.0	58	138.2	33.3	92	197.6	171	340	644
-21.1	-6	21.2	-2.8	27	80.6	15.6	59	140.0	33.9	93	199.4	177	350	662
-20.6	-5	23.0	-2.2	28	82.4	16.1	60	141.8	34.4	94	201.2	182	360	680
-20.0	-4	24.8	-1.7	29	84.2	16.7	61	143.6	35.0	95	203.0	188	370	698
-19.4	-3	26.6	-1.1	30	86.0	17.2	62	145.4	35.6	96	204.8	193	380	716
-18.9	-2	28.4	-0.6	31	87.8	17.8	63	147.2	36.1	97	206.6	199	390	734
-18.3	-1	30.2	0.0	32	89.6	18.3	64	149.0	36.7	98	208.4	204	400	752
-17.8	0	32.0	0.6	33	91.4	18.9	65	150.8	37.2	99	210.2	210	410	770
-17.2	1	33.8	1.1	34	93.2	19.4	66	152.6	38	100	212	216	420	788
-16.7	2	35.6	1.7	35	95.0	20.0	67	154.4	43	110	230	221	430	806
-16.1	3	37.4	2.2	36	96.8	20.6	68	156.2	49	120	248	227	440	824
-15.6	4	39.2	2.8	37	98.6	21.1	69	158.0	54	130	266	232	450	842
-15.0	5	41.0	3.3	38	100.4	21.7	70	159.8	60	140	284	238	460	860
-14.4	6	42.8	3.9	39	102.2	22.2	71	161.6	66	150	302	243	470	878
-13.9	7	44.6	4.4	40	104.0	22.8	72	163.4	71	160	320	249	480	896
-13.3	8	46.4	5.0	41	105.8	23.3	73	165.2	77	170	338	254	490	914
-12.8	9	48.2	5.6	42	107.6	23.9	74	167.0	82	180	356	260	500	932
-12.2	10	50.0	6.1	43	109.4	24.4	75	168.8	88	190	374	266	510	950
-11.7	11	51.8	6.7	44	111.2	25.0	76	170.6	93	200	392	271	520	968
-11.1	12	53.6	7.2	45	113.0	25.6	77	172.4	99	210	410	277	530	986
-10.6	13	55.4	7.8	46	114.8	26.1	78	174.2	100	212	413	282	540	1.004
-10.0	14	57.2	8.3	47	116.6	26.7	79	176.0	104	220	428	288	550	1.022
-9.4	15	59.0	8.9	48	118.4	27.2	80	177.8	110	230	446	293	560	1.040
-9.0	16	60.8	9.4	49	120.2	27.8	81	179.6	116	240	464	299	570	1.058
-8.3	17	62.6	10.0	50	122.0	28.3	82	181.4	121	250	482	304	580	1.076
-7.8	18	64.4	10.6	51	123.8	28.9	83	183.2	127	260	500	310	590	1.094
-7.2	19	66.2	11.1	52	125.6	29.4	84	185.0	132	270	518	316	600	1.112
-6.7	20	68.0	11.7	53	127.4	30.0	85	186.8	138	280	536			
-6.1	21	69.8	12.2	54	129.2	30.6	86	188.6	143	290	554			
-5.6	22	71.6	12.8	55	131.0	31.1	87	190.4	149	300	572			
-5.0	23	73.4	13.3	56	132.8	31.7	88	192.2	154	310	590			



Notes	

### **Agents & Distributers**

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Territories: Barbados, Benin, Burkina Faso, Cameroon, Chad, Congo, Côte d'Ivoire, Djibouti, Gabon, Ghana, Guinea, Jamaica, Liberia, Madagascar, Malawi, Mali, Mozambique, Senegal, Sierra Leone, Trinidad and Tobago, Zambia, Zimbabwe

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### Middle East

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Ravago Chemicals Ukraine LLC.

Address: Ravago Chemicals Ukraine LLC Velyka Vasylkivska str., 9/2, of. 49 01024 Kyiv, Ukraine. Tel: +380443643212 Email: Yaroslav.Sidelinkov@ravagochemicals.com

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### **Portugal**

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**Emulsion Resins plant** Engineering Square (E2) Industrial Complex North Extensions Industrial Zone

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