



CHEMPART[®] SC400

POLYSACCHARIDE RESIN

Balance Your Quality Equation

POLYSAC- CHARIDE RESIN

FOR ENAMEL PAINTS



CHEMICAL PARTNERS

Balance Your Quality Equation



Chempart SC400

Polysaccharide Resin

1. General Information

SC400 is polysaccharide resin that has been specially modified to become a film forming resin for preparation of water in oil emulsion for paints based on short drying alkyd and styrenated alkyd.

2. Properties:

- **Appearance:** clear to hazy liquid
- **Non Volatile :** minimum 60%
- **Viscosity at 25 C :** 500 ± 100 cp
- **Density at 20C :** 1.25 ± 0.05 g/ml
- **PH:** 3-6

Theoretical values are listed actual values may vary depending on test method and coating composition.

3. Benefits:

- Environmental friendly technology to produce solvent base paints meeting the VOC standards.
- Significant cost saving by incorporating water in solvent base paints
- Improve yellowing resistance, dryness and gloss retention on finished product.
- The final product is still solvent base and remains thinnable with aliphatic or aromatic solvents.
- High stability at low and high temperature.
- Improve mechanical properties and dry film appearance of paint.



4.Dose:

- For direct use from 2% to 3% based on weight of the paint formulation.
- For emulsion intermediate the dose should be recommended by paint formulator.

5.Application:

It can be used in solvent base paints based on long and medium alkyd resin

5.Stability test for emulsion intermediate:

•Viscosity test:

- Viscosity measured by K.U at 25°C must be in the range of 90-95 KU
- Measured by stormer or equivalent method

•Heat stability test:

- The test is done by putting a sample of Emulsion Intermediate in the oven at 60 °C for 72h.
- Check the sample, if there's any separation or not, if not the sample is OK.

Emulsion intermediate

Material	Qty.
Alkyd	15%
Xylene	17%
SC400	6%
Water	62%
Total	100%





6. How to use:

• Emulsion intermediate: process:

- 1- Add alkyd resin.
- 2- Add Xylene.
- 3- Run mixer on low speed just for mixing around 3 to 5 minutes.
- 4- Add SC400 and mix for 3 to 5 minutes.
- 5- Increase mixer speed to 30 m/s tip speed.
- 6- Start adding the water continues with the rate between 100 L/Min in the vortex center.
- 7- After adding all the water continue mixing with the same speed for 30 minutes.
- 8- Take sample to be tested.

• Direct Addition of SC400: process:

- 1- Mill base is prepared by normal process.
- 2- SC400 added to the mill base.
- 3- Mix for 5 minutes on medium speed.
- 4- Increase mixing speed to 1100 to 1500 RPM.
- 5- Start adding water slowly and continuously with addition rate 100 L/Min.
- 6- Mix from 20 to 25 minutes on high speed.

7. Guide Formula: (White enamel)

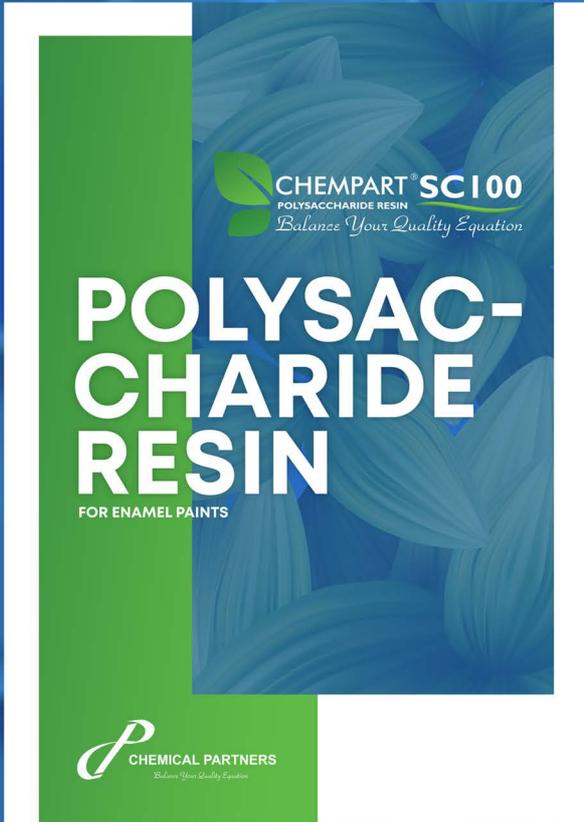
Formula of White Enamel			
S.N	Matter	Without EI	With EI (20%)
1	Chempart 16/50 SRSX (60%)	60%	45%
2	Xylene	13.09%	8.09%
3	Bentone SD 2	0.25%	0.25%
4	Neospense 601	0.35%	0.35%
5	TiO 2	25%	25%
6	Emulsion intermediate	-	20%
7	Co 10%	0.2%	0.2%
8	Ca 10%	0.4%	0.4%
9	Zr 10%	0.4%	0.4%
10	Anti Skinning	0.3%	0.3%
11	Tint (Ayd 234A)	0.01%	0.01%
Total		100.00	100.00

S.N	Test	Without EI	With EI (20%)
1	Viscosity at 25°C spindle 5	2.616 RPM 50	2.440 RPM 50
2	Density at 25°C	1.2394	1.2366
3	Solid Content %	67.82	57.88
4	Gloss	89	89
5	Touch Dry	15-18 min.	15-18 min.
6	Adhesion	4B	3B
7	P/B Ratio	0.55	0.41

8. Application

It can be used in solvent base paints based on long, medium, short fast dry and styrenated Alkyd resin.

OUR OTHER PRODUCTS

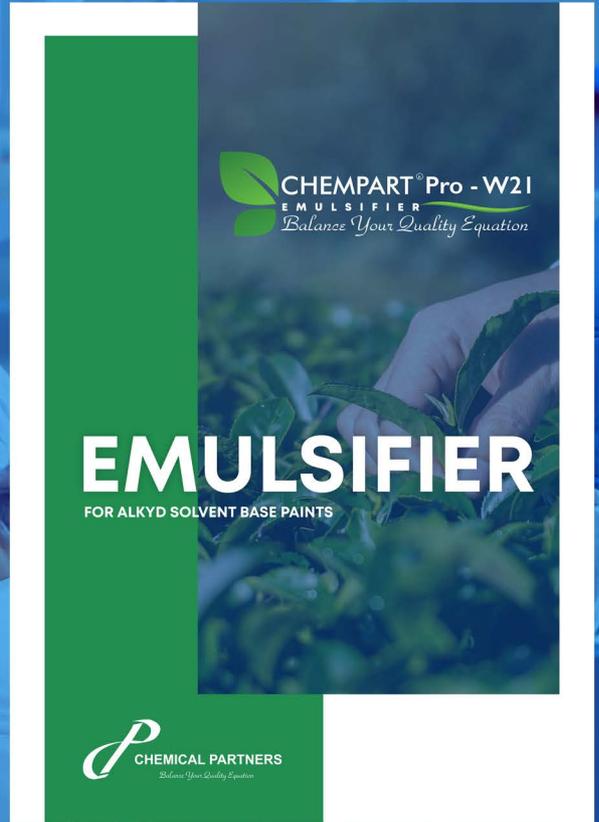


CHEMPART[®] SC100
POLYSACCHARIDE RESIN
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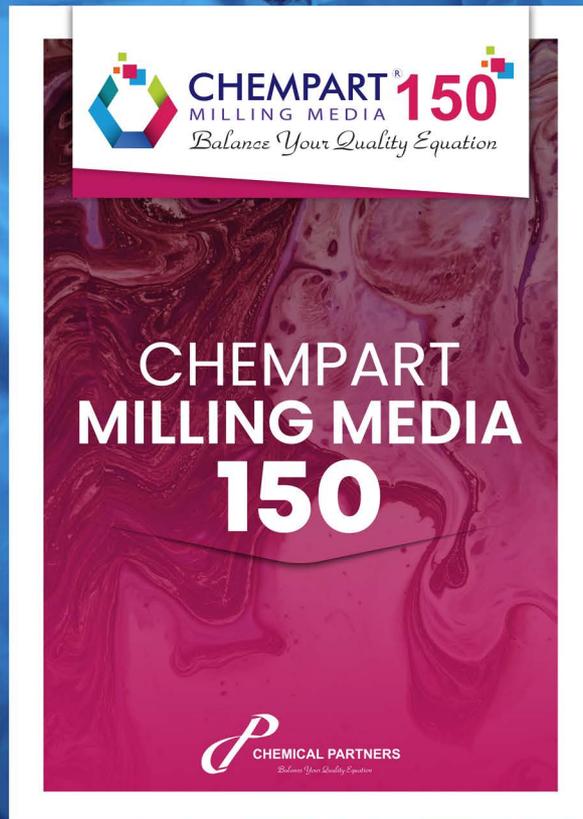


CHEMPART[®] Pro - W21
EMULSIFIER
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EMULSIFIER

FOR ALKYD SOLVENT BASE PAINTS

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 CHEMPART[®] 150
MILLING MEDIA
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