



CHEMPART[®] Pro - W21

EMULSIFIER

Balance Your Quality Equation

EMULSIFIER

FOR ALKYD SOLVENT BASE PAINTS



CHEMICAL PARTNERS

Balance Your Quality Equation

Chempart Pro-W21

General Information

1.Chempart Pro – W21

General Information

Chempart Pro - W21 is an ionic, high molecular weight water in oil emulsifier, designed for water incorporation into solvent borne trim paints, varnishes and wood stains. This technology is used for formulating low VOC solvent borne paints by incorporating water as a liquid filler.

2.Properties:

- **Appearance:** Yellowish, clear to cloudy liquid
- **Ionic Character:** Anionic
- **Nonvolatile content:** 2± %60
- **Density@°25c:** 0.05± 1.25g/ml
- **Viscosity@°25c:** 400 – 800 cp @ sp5 / rpm 50

3.Benefits:

- Does not impede the oxidative drying process as will amine based technologies.
- Providing superior colloidal stability in the resin emulsion with minimum impact on film properties.
- Maintain excellent gloss and gloss retention.
- Non-migratory character from physical polymer entanglement thus improving mechanical properties.
- Achieving excellent performance in terms of whitening and yellowing resistance.



- Absolute compatibility with a wide range of solvent systems.
- Achieving good formation stability in pumping that not influenced by pump type or rotation used.
- Satisfying regulation limits of the VOC.
- Maintaining thinning the final coating with mineral spirits or other alkyd solvents.
- Significant cost reduction, easy incorporation.
- Indicated for long, medium and short alkyd resins.

4. Use and dosage:

- Chempart Pro - W21 should be added at 1.5 – 2.5% calculated on the total weight of the water content.
- Chempart Pro - W21 is incorporated and homogenizes readily in all other coating ingredients.



8. White Enamel Formulation with long Alkyd

S.N	Raw Material	With Emulsifier.	Without Emulsifier.
1	Long Alkyd 70%	35.00	53.00
2	W. S	11.00	20.00
3	Dis 601	0.30	0.30
4	Benton 54	0.25	0.25
5	Ca 10%	0.70	0.75
6	Methanol	0.10	0.10
7	TR 88	10.00	10.00
8	CaCo3	0	15.00
9	Chempart Pro W21	1.50	0
10	Water	40.00	0
11	Co 10%	2.00	0.80
12	Zr 12%	0.50	0.55
13	Oxime	0.25	0.25
Total		100.00	100.00

White Enamel based on Short Alkyd:

S.N	Raw Material	With Emulsifier.	Without Emulsifier.
1	Short Alkyd-60%	40.00	60.00
2	Xylene	13.39	22.70
3	Dis 601	0.35	0.35
4	Benton 54	0.25	0.25
5	TR 902	15.00	15.00
6	Chempart Pro W21	0.96	0
7	Water	28.80	0
8	CO 10%	0.15	0.20
9	CA 10%	0.30	0.50
10	ZR 12%	0.40	0.60
11	Oxime	0.30	0.30
12	Methanol	0.10	0.10
Total		100.00	100.00

5. How to use:

• Direct water addition:

1-After the total addition of the Chempart Pro - W21 on the prepared mill base this should be mixed minimum for 5 minutes before incorporation of the water.

2-Then water should be added continuously and gradually for a period of approximately 5 minutes under sufficient agitation.

3-Laminar flow should be maintained because in turbulent conditions, the efficiency of formation of the emulsion is very poor.

4-After adding the total quantity of water, the mixture should be maintained under agitation of 20 M/S keeping laminar flow for a period of 15-20 minutes, in order to guarantee a stable emulsion with very small size particles.

• Pre-emulsion preparation:

1-Chempart Pro - W21 can be prepared as a pre-emulsion. In this case.

2-The Chempart Pro - W21 can be incorporated upon the homogenization of the resin with the Mineral Spirit.

3-Then water should be added gradually into the vortex.

4-and after its all addition; agitation should continue for 20 - 30 minutes to ensure complete homogenization.

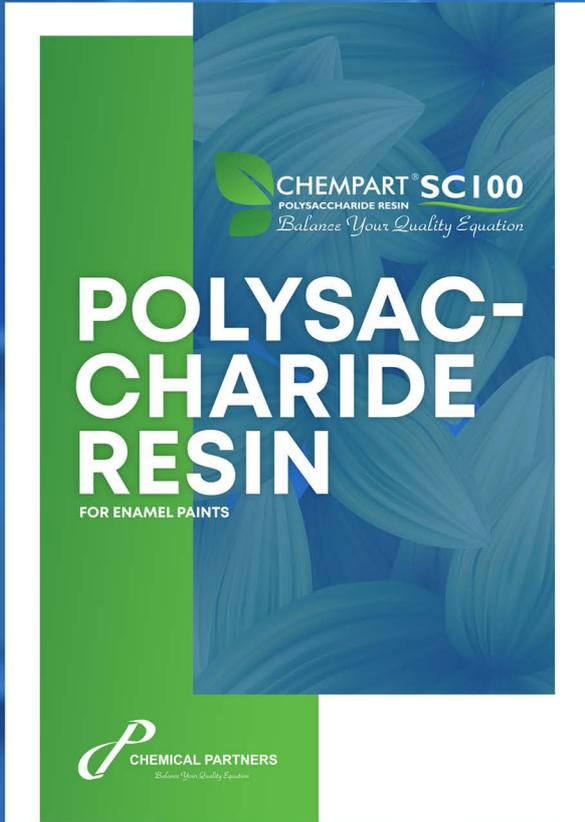
5-A speed of 20 M/S should ensure excellent formation and stability of the emulsion.

This pre-emulsion can then be mixed with the mill base and dispersed to complete the coating for required adjustments.

Our recommendations regarding our products are based on in-depth tests developed by our Technical Department.

For the formulation of E.I please contact our technical department.

OUR OTHER PRODUCTS



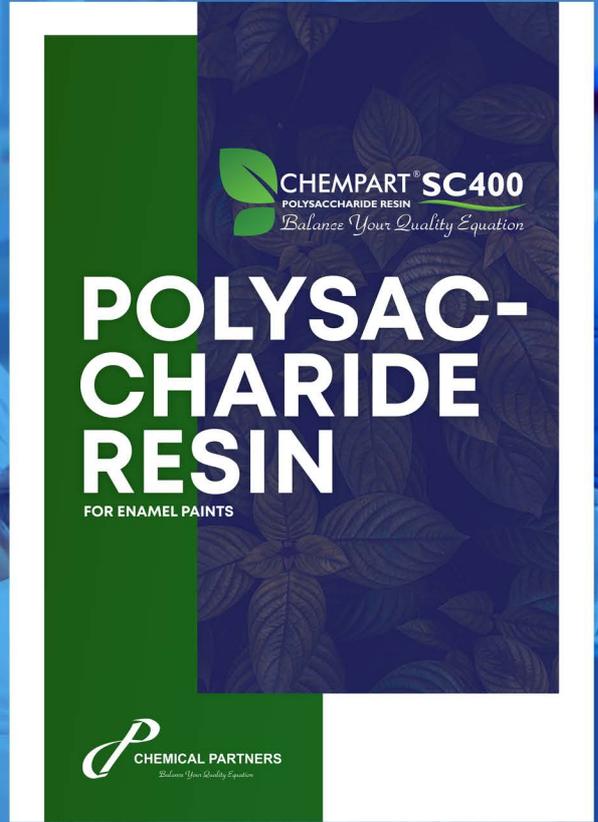
CHEMPART[®] SC100
POLYSACCHARIDE RESIN
Balance Your Quality Equation

POLYSAC- CHARIDE RESIN

FOR ENAMEL PAINTS

 CHEMICAL PARTNERS
Balance Your Quality Equation

The cover features a green vertical bar on the left and a background of light green leaves.



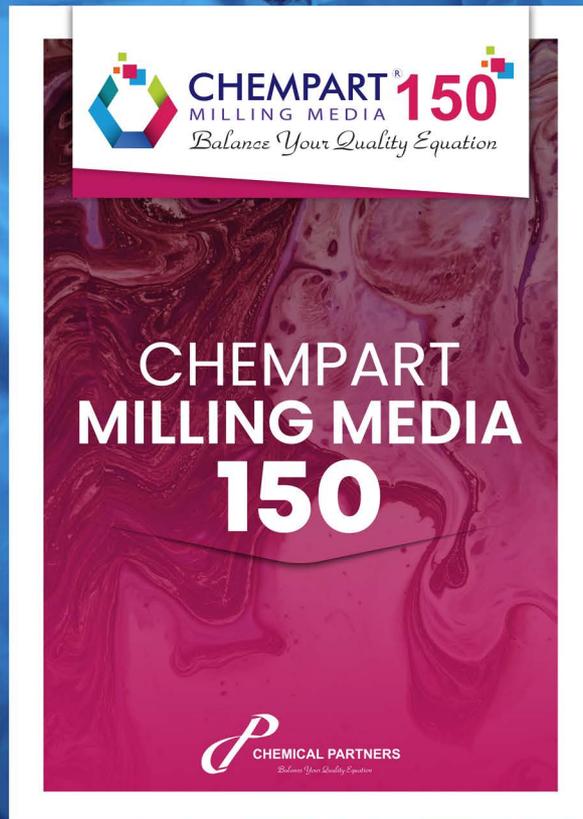
CHEMPART[®] SC400
POLYSACCHARIDE RESIN
Balance Your Quality Equation

POLYSAC- CHARIDE RESIN

FOR ENAMEL PAINTS

 CHEMICAL PARTNERS
Balance Your Quality Equation

The cover features a green vertical bar on the left and a background of dark blue leaves.



 CHEMPART[®] 150
MILLING MEDIA
Balance Your Quality Equation

CHEMPART MILLING MEDIA 150

 CHEMICAL PARTNERS
Balance Your Quality Equation

The cover features a white top section with the logo and a background of red and white marbled patterns.



CHEMICAL PARTNERS

Balance Your Quality Equation

Egypt, 10th of Ramadan City, Industrial Zone A1, Block 31/3/A, P.O Box : 1093
Tel. : (+20) 55 4 36 20 23 – (+20) 55 44 11 391/2/3 Mob : (+20) 010000 3424 3/4
Fax : (+20) 55 4 36 23 75 – (+20) 55 44 11 0 72