

THREEPHOR™ SH-CA

Threephor SH-CA is fluorescent whitening agent with slightly reddish white color shade for application in surface coatings and at the size press. Especially high whiteness can be obtained in the coating process.

1. Special properties

- Very good stability to acid and outstanding whiteness in the low pH.
- Excellent good whiteness in coating process.
- Compatible with most coating agent.
- Easy to use as liquid type.

2. General properties

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|----------------------|---------------------|
| • Appearance | Brown liquid |
| • Chemical structure | Stilbene derivative |
| • Ionic character | Anion |
| • pH (1%) | 8 ~ 10 |
| • Density (25°C) | 1.1~1.2 |
| • Viscosity (25°C) | ≤100cp |

3. Storage stability

Threephor SH-CA is stable when properly stored in closed containers at 20°C. The product is sensitive to cold below 0°C and sensitive to heat above 40°C.

4. Application

1) Size Press

- It is used for high whiteness which cannot be achieved with other FWAs due to greening.
- Having only moderate affinity for the cellulose fibre, A highly uniform whiteness at the size press.
- It is equally effective with all starches used in size press application and can be applied together with PVA, CMC, anionic and slightly cationic, and synthetic sizing additives.
- Its effect is only slightly affected by the base paper pH.

Average dosage: **Max. 40g/L (size-press liquor)**

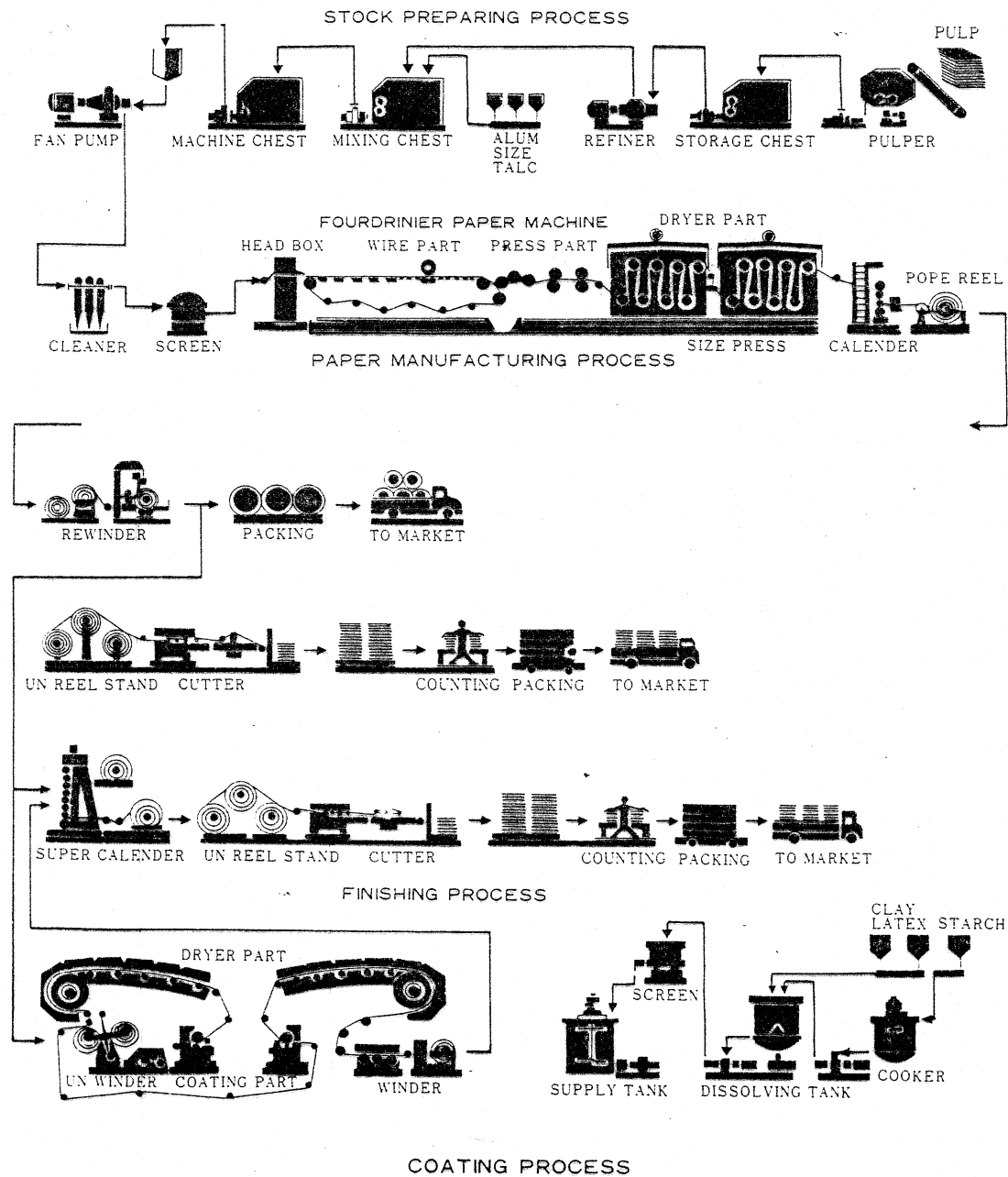
2) Surface Coating

- It is used to obtain very high white coated papers.
- To achieve the best effects with FWAs, co-binders are essential as carriers because of low affinity for coating pigments and synthetic lattices based on copolymers of acrylic acid ester or butadiene styrene.
- Suitable carriers are PVA, CMC, starch and synthetic co-binders.
- The best effects are obtained with the following amounts of co-binders, based on solids content:

PVA	1.2 parts
CMC	1.2 parts
Starch	6.0 parts
Synthetic co-binder	0.4 parts

Average dosage: **0.2 ~ 2.0 parts
(parts based on the coating pigment)**

【Paper manufacturing process】



TECHNICAL DATA SHEET

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