Xytu® XY-CS100
Low-Odor Coalescing Agent

Xytu® XY-CS100 is a low-odor, non-VOC, environmentally friendly coalescing agent that improves film formation over a wide range of temperatures and relative conditions. It works synergistically with associative thickeners, reducing their required dosage by approximately 25%. It improves film properties and application performance, including touch-up properties and scrub resistance, and enhances weather resistance.

Xytu® XY-CS100 from Nanjing Xinyi Synthesis Technology Co., Ltd. is an environmentally friendly film-formation aid for various emulsions and adhesives. It offers advantages over currently available coalescing agents, can be used at a suitably reduced dosage, and may be used alone. It promotes film formation and provides storage stability, leveling and adhesion in formulated paints, and can increase gloss.

Typical Physical Properties

Property (unit)	**Value**
Appearance	Colorless, transparent liquid
Color (Pt-Co scale)	≤15
Acid value (mg KOH/g)	≤0.5
Boiling point (°C)	282
Refractive index (25 °C)	1.44
Flash point (°C)	160
Purity (% w/w)	≥99.0
Freezing point (°C)	-70

Performance Characteristics

1. A coalescing agent commonly used in coatings to lower the film-formation temperature of emulsions.
2. Low water solubility and high coalescing efficiency.
3. Has some volatility and remains in the coating during film formation to perform its function. It evaporates completely after film formation without affecting film properties.
4. Does not affect emulsion stability.

Recommendations for Use

1. In general, a dosage of Xytu® XY-CS100 of approximately 3%-9% based on emulsion solids may be considered. A higher dosage can provide better results; a dosage above 12% may affect emulsion stability.
2. In latex paint production, the dosage of Xytu® XY-CS100 depends mainly on the hardness of the emulsion polymer. Harder emulsions (higher Tg) require more than softer emulsions (lower Tg) to achieve the required film formation. In principle, it can be added directly under stirring at any production stage. Different formulations using the same emulsion, but with different pigment volume concentrations (PVC), may also require different dosages of Xytu® XY-CS100.
3. Xytu® XY-CS100 may be added in two portions to make full use of its benefits:

a) Add 1/2 of the dosage during grinding to help wet and disperse pigments and fillers.

b) Add 1/2 of the dosage during let-down to help suppress foam formation.

Packaging

200 kg drums and 950 kg intermediate bulk containers.

Storage and Transportation

Store in a dry, well-ventilated warehouse away from direct sunlight. Transport and store above 5 °C. Shelf life is 2 years.