



TU-209

Polyurethane associated thickener



Overview

TU-209 is a non-ionic polyurethane associative thickener primarily suitable for various aqueous systems. It provides efficient thickening at medium to low shear viscosity, enhances anti-sag properties and opening can performance, while still maintaining good flow and leveling characteristics. It is a non-toxic, low-odor, environmentally friendly product.

Physicochemical Properties

| | | | |
|----------------------|-------------------------------------|--------------------------|------------------------------------|
| Appearance | Transparent, slightly yellow liquid | Composition | Non-ionic associative polyurethane |
| Solid Content | 25.0 ± 1.0 % | Solvent | Water/BCS |
| Density | 1.10 g/ml | Viscosity at 25°C | 3000-5000 cp |

Characteristics & Advantages

TU-209 exhibits outstanding pseudoplastic rheological properties.

- Free of organotin compounds and APEO compounds, making it a non-toxic, low-odor, environmentally friendly product
- Efficient thickening at low shear viscosity, making it particularly suitable for spraying and thick coating applications
- Provides excellent feedability, improving anti-sag properties and opening can performance
- Outstanding resistance to water, alkali, scrubbing, staining, corrosion, and delamination
- Ensures uniform film thickness and coverage without affecting gloss
- Easy to use; can be added at any stage without prior dilution or alkaline neutralization; thickening and leveling effects are achieved instantaneously
- Performance is unaffected by pH and can be used over a wide pH range
- High resistance to microbial and enzymatic degradation
- Higher effective solid content for better thickening effects, making it more economical

| | |
|----------------------------------|---|
| Dosage | Typically, TU-209 is used in conjunction with TU-202 in formulations. Recommended dosage: 0.3%-0.5% |
| Application | Water-based architectural coatings, water-based industrial paints, water-based adhesives, water-based inks, and petrochemical water treatment |
| Precautions & Storage | When used with TU-202, add TU-202 first. Under conditions of insufficient mixing during production, it is recommended to dilute with ethylene glycol or propylene glycol at a 1:1 ratio before use; avoid sharing with polyacid dispersants. Store in a cool, ventilated place; keep containers tightly sealed. During winter storage, take antifreeze measures (e.g., if frozen, stir adequately after thawing to continue use). Under recommended storage conditions, the product has a shelf life of 2 years. |
| Safety | Refer to MSDS |
| Packaging | 25 KG/Barrel |