



## TU-205

# Polyurethane associated thickener



### Overview

TU-205 is a non-ionic polyurethane associative thickener primarily suitable for various aqueous systems. It provides excellent thickening effects at medium to high shear viscosity, while offering outstanding flow and leveling properties, as well as exceptional film-forming performance and gloss enhancement. It is a non-toxic, low-odor, and environmentally friendly thickening and leveling dual-function rheological modifier.

### Physicochemical Properties

Appearance	Transparent, slightly yellow liquid	Composition	Non-ionic associative polyurethane
Solid Content	18.0 ± 1.0 %	Solvent	Water/BCS
Density	1.10 g/ml	Viscosity at 25°C	1000-4000 cp

### Characteristics & Advantages

- Contains no organotin compounds or APEO compounds; classified as a non-toxic, low-odor, environmentally friendly product
- Thickens at medium to high shear viscosity while providing polar flow, leveling, and hiding properties
- Offers excellent opening can performance, high thickening efficiency, resistance to splashing during roller application, and durability against water, alkali, scrubbing, staining, and delamination without affecting gloss
- Easy to use; can be added at any stage without prior dilution or alkaline neutralization; thickening and leveling effects can be achieved instantaneously
- Performance is unaffected by pH and can be used over a wide pH range
- High resistance to microbial and enzymatic degradation

### Dosage

In typical formulations, TU-205 is often used in conjunction with TU-202. In large particle size emulsions, TU-205 can be used alone as a leveling and thickening agent.

Recommended dosage: 0.3%-1.5%

### Application

Water-based architectural coatings, water-based industrial coatings, water-based adhesives, water-based inks, and petrochemical water treatment.

**Precautions  
Storage**

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When used in combination with TU-202, add TU-202 first; 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