



## Technical Data Sheet

**Product Name:** Polyurethane Anti-yellowing Antioxidant UVK-TE

### Typical Properties:

Appearance	Colorless transparent liquid
Density (g/cm <sup>3</sup> , 25°C)	1.057
Viscosity (mPa.s, 25°C)	300 ± 50
Odor	With slight special odor

**Solubility:** It is easily soluble in general polyurethane materials such as polyether polyols and plasticizers.

### Features & Advantage:

Polyurethane inevitably encounters high temperature situations during synthesis, storage, and use, such as prepolymerization reactions, high-temperature storage in summer, and use in high heat environments. This can lead to yellowing of polyurethane, affecting its appearance, physical properties, and durability. UVK-TE is an efficient composite antioxidant developed specifically for the above phenomena, with the following characteristics:

- **It can effectively suppress the yellowing and discoloration phenomena that are prone to occur during the synthesis and storage process of polyurethane prepolymerization.** Some polyurethane raw materials contain trace impurities that are easily oxidized to form chromophores during high-temperature prepolymerization, leading to discoloration and yellowing of the liquid during the prepolymerization synthesis process. UVK-TE can effectively inhibit the formation of such chromophores and maintain the stability of the appearance and color of the prepolymer;
- **It can effectively inhibit the aging and degradation phenomenon of polyurethane products during use.** UVK-TE can eliminate singlet oxygen, halt the chain oxidation reaction, inhibit and delay the oxidative degradation phenomenon that occurs during the use of polyurethane materials, and maintain the material's physical properties without decreasing.
- **Efficient and with minimal addition.** UVK-TE has long-lasting properties, and a small amount of addition can effectively inhibit the yellowing and degradation of polyurethane materials.

### Application:

It is recommended to be used for the synthesis of polyurethane prepolymers, especially for polyether type polyurethane materials, and for light color or transparent polyurethane elastomer products with strict appearance requirements, such as single component hot-melt adhesive PUR, skating pulley, transparent light color PU handicrafts, etc.

### User's Guide:

- It can be added into Isocyanate or polyol components at any production stage.
- The dosage depends on the usage situation, and the recommended dosage is 0.3-1%.
- Pay attention to airtight storage during normal use, and immediately cover and seal it tightly after use. Do not expose it to the air.

### Handling & Storage:

Product must be stored tightly and in a ventilated, dry, and cool warehouse, avoiding sources of ignition and sunlight..

**Package:** 25kg/200kg in HDPE drum

**Shelf Life:** The unopened shelf life is 18 months from the date of manufacture. If it passes the inspection after expiration, it can be used normally.

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