



Technical Data Sheet

Product Name: Anti-yellowing Aliphatic Polyurethane Catalyst WCAT-WP01A

Typical Properties:

Appearance	Light yellow to amber liquid
Colour (Fe-Co)	≤6
Density (g/cm ³ , 25°C)	1.105
Viscosity (mPa.s, 25°C)	5-20
Other Properties:	It will crystallize below 15 °C, slightly heat and melt it before use.

Solubility: Easily soluble in common polyurethane raw materials such as polyether polyol and plasticizer.

Eco-friendly Characteristic: It does not contain regulated toxic components butyl tin and o-benzene.

Applications:

It is used in non yellowing one component aliphatic isocyanate system, such as anti-yellowing one component PU adhesive, waterproof / anti-corrosion coating, floor coating and other moisture curing polyurethane materials; And used to replace T-12 due to the insufficient catalytic activity and environmental protection problems of T-12; It is used for both one-component and two-component polyurethane coating or adhesive.

It is used in the non yellowing adhesive of plastic sports ground, firmly bonding EPDM and other environmental particles, and producing breathable and composite runways and courts. It is widely used in kindergartens, primary and secondary school sports venues, stadiums, national fitness trails, amusement parks, gyms, residential areas, villas, etc.

Features & Advantage:

WCAT-WP01A is a high efficiency catalyst developed for the one component anti-yellowing polyurethane which is based on the principle of crosslinking and curing reaction between isocyanate groups and water in the environment. It significantly improved the curing rate of low activity aliphatic polyurethane system (IPDI / HMDI / HDI), and the catalytic activity is more than twice that of T-12. Compared with T-12 (dibutyltin dilaurate), WCAT-WP01 has the following characteristics:

❖ **High catalytic activity.**

Especially developed for low activity aliphatic isocyanate (IPDI / HMDI / HDI) system, the catalytic activity is more than twice that of T-12, especially significantly improved the curing speed.

❖ **Both the surface and body are curing fast at low temperature in winter, especially in the middle and late stage of coating curing at low temperature.**

It overcome the disadvantage of slow curing of organotin at low temperature in winter. Tested at low temperature (5°C) and ambient humidity of 10-30%, it still maintains high curing activity, which is several times shorter than the curing time with T-12. It performs well in both aliphatic and aromatic systems.

❖ **It is especially recommended for one component aliphatic isocyanate system.**

One component aliphatic polyurethane system is usually used in high-end applications. Due to the excellent performance of WCAT-WP01A in this system, it is strongly recommended.

❖ **Environmental protection of materials.**

It does not contain butyl tin and o-benzene plasticizer under environmental control.

User's Guide:

- For one component, the time of adding is when isocyanate and polyether polyol are prepolymerized, and it is recommended to add it in batches; For two-component polyurethane, it is recommended to be added into polyol component.
- The dosage is 0.01-0.6%, It can be added according to the dosage of T-12.
- Because the formula and using process have different effects on the storage stability, it is suggested that the storage stability test must be carried out before use.
- This product has certain water absorption. Do not expose it to the air to prevent water absorption. After normal use, pay attention to immediately close the tank mouth.



- The color will gradually darken during storage and the color difference between batches is a normal phenomenon and does not affect the quality.

Handling & Storage:

Product should be stored in a cool, dry environment away from sunlight, excessive heat and rain.

Package: 25kg/200kg in HDPE drum

Shelf Life: The unopened shelf life is 12 months from the date of manufacture. If the catalytic activity is not reduced after the shelf life, it can still be used as qualified products.

All recommendation and technical information (whether verbal, written or by way of product evaluations), including any suggested formulations contained herein is provided for information purpose only and does not constitute a legal contract as well as suitable for relating to the third party rights. The conditions of your use and application of our products, technical assistance and information are beyond our control. Therefore, no guaranty or warranty for your evaluation is made. Consequently the user assumes all risks in connection with the use and handling of this product based on our technical information and recommendations, final determination of suitability of this product is the sole responsibility of the user.