



CUCAT-HST

Urethane Catalyst for Elastomer

CUCAT-HST is an effective catalyst for the reaction of isocyanates and polyols with hydroxyl groups used in the production of cast elastomers, specially high performance for MDI+PPG+BDO system. It is a proprietary mixed organo metallic complex formulated to be an alternative to mercury catalysts without the toxicity concerns. It can pass China and EU environmental regulations.

Typical Properties	Appearance	Clear, light yellow transparent liquid
	Colour (Fe-Co)	≤1
	Density (g/cm ³ , 25°C)	1.03
	Viscosity (mPa.s, 25°C)	95

Solubility Soluble in normal polyurethane raw materials (polyether polyol, plasticizer)

Applications CUCAT-HST is recommended to use in 2-component polyurethane system, pre-polymer is MDI+PPG and curing with PPG+BDO (or other small molecule alcohol). It is the updated catalyst of CUCAT-HS which is the best choice for MDI+PTMG+BDO system. CUCAT-HST is not recommended for TDI pre-polymer curing with amine system.

Advantage Descriptions **CUCAT-HST is formulated for non-bubble requirement in PU CASE applications using alcohol as curing agent in MDI system. The unique characteristics are following:**

- **Restrain the reaction of isocyanates and water.**
CUCAT-HST can obviously restrain the reaction of isocyanate and water, directionally catalyzing isocyanates and polyols with hydroxyl groups. It performs well to effectively prevent the CO₂ bubbles formed. Therefore, the cured-surface problems, including pinhole, cracking, bulging, peeling, can be solved visibly.
- **Specially formulate for MDI+PPG+BDO system.**
For the system using MDI pre-polymer cured with BDO to produce elastomer, long post curing time is the most important factor that cause the production efficiency slowing down. Usually using catalysts can solve this problem. However, most catalysts could cause shrink especially for big size products, the shrinkage would be definitely obvious if using less reactive secondary hydroxyl groups PPG. CUCAT-HST can balance the reaction rate, avoid reaction heat concentration and reduce side reaction. Using CUCAT-HST in MDI+PPG+BDO system, the curing process will be long pot life and short post curing time, that could solve shrinking problem perfectly and improve physical performance.



广州优润合成材料有限公司

Guangzhou Yourun Synthetic Material Co., Ltd

Typical Usage Levels	<ul style="list-style-type: none">● Suggest adding in polyol component after vacuum degassing.● Levels of 0.05-0.3% as supplied by weight on total polyol volume.
Handling & Storage	CUCAT-HST is sensitive to moisture. There, exposure to atmosphere should be avoided. Product should be stored in a cool, dry environment away from sunlight and excessive heat.
Package	25kg/200kg in HDPE drum
Shelf Life	The unopened shelf life is 12 months from the date of manufacture.

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.