



Amine Catalysts for Polyurethane Foam

TOYOCAT-HP•HPW

1. Characteristics

- * TOYOCAT-HP, along with the HX series of tertiary amine catalyst systems, is effective in reducing PVC discoloration for automotive semi-rigid polyurethane foam systems.
- * TOYOCAT-HP exhibits a similar reaction profile to that of N-Ethylmorpholine. And it also exhibits high thermosensitive properties, making it excellent for isocyanate-polyol reactions.
- * TOYOCAT-HP is a reactive amine system, therefore, it exhibits no migration or residual odor in the finished product.
- * TOYOCAT-HP's weak activity associates to an overall improvement in the permeability of flexible foams, as well as semi-rigid foam systems.
- * TOYOCAT-HPW, which contains 10wt% of water instead of DPG, has a feature of lower freezing point.

2. Typical Properties

	HP	HPW
Appearance	Amber liquid	Amber liquid
Specific Gravity D_{20}^{20}	0.99	1.00
Water Content (%)	< 0.5	9.7-10.3
Solubility in Water		
Freezing Point ()	< 30	< 5
Flash Point () [C.O.C]	114	127
Viscosity (mPa s) (at 35)	30	30
Calculated OH number (mgKOH/g)	434	350

3. Toxicity

Oral (rat) LD ₅₀	6040 mg/kg	6296 mg/kg
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4. Handling and Storing

This product has a low vapor pressure and toxicity, however handling in well ventilated area is recommended.

When this product comes into direct contact with the eyes or skin, inflammation will occur. Wearing protective gear or applying protective cream is most effective when handling. In the event that contact is made with the eyes or skin, wash immediately

with large amount of water. If the eyes are affected, seek medical attention after washing. This product may turn slightly darker when stored over long periods of time. However, catalytic activity will not be affected.

5 Shipping information

Net weight

Packaging	kg	1b
Drum (200L)	190	418
(20L)	18	40

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