



### 1. Characteristics

- \* TOYOCAT-TMF is a strong blowing catalyst, which exhibits a delayed action.
- \* TOYOCAT-TMF provides improved foam flowability as well as dimensional stability in rigid foam systems.
- \* TOYOCAT-TMF produces a foam with a fine cell structure and low k-factor, when using together with based catalysts such as TOYOCAT-NP,MR and so on in cyclopentane blown rigid foam systems.
- \* TOYOCAT-TMF can be used for both flexible and rigid foams instead of a conventional blowing catalyst.

### 2. Typical Properties

Appearance	Amber liquid
Specific Gravity $D_{20}^4$	1.06
Water Content (%)	< 1.5
Solubility in Water	
Freezing Point ( )	< -20
Flash Point ( ) [C.O.C]	81
Viscosity (mPa s) (at 25 )	96
Calculated OH number (mgKOH/g)	1075

### 3. Toxicity

Oral (rat) LD <sub>50</sub>	1976 mg/kg
-----------------------------	------------

### 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	lb
Drum (200L)	200	440
(20L)	20	44

---

## TOSOH CORPORATION

CORPORATE OFFICE:	TOSOH CORPORATION Organic Chemicals Division Shiba-koen First Building, 3-8-2 Shiba, Minato-ku, Tokyo 105-8623, Japan Phone: 81-3-5427-5164 Fax: 81-3-5427-5215 E-mail: fc_amine@tosoh.co.jp
EUROPE OFFICE:	TOSOH EUROPE B.V. Crown Building-South, Hullenbergweg 359, 1101 CP Amsterdam Z.O., The Netherlands Phone: 31-20-5650010 Fax: 31-20-6915458 E-mail: tosoh@tosoheur.com
USA OFFICE:	TOSOH USA, INC. Suite 600, 1100 Circle 75 Parkway, Atlanta, Georgia 30339-3097, U.S.A. Phone: 1-770-956-1100 Fax: 1-770-956-7368 E-mail: info@tosohusa.com
SINGAPORE OFFICE:	TOSOH FINE CHEMICALS PTE., LTD. 133 Cecil Street #15-01, Keck Seng Tower, Singapore 069535 Phone: 65-226-5106 Fax: 65-226-5215 E-mail: tfccah@cyberway.com.sg

*Visit us at [www.tosoh.com](http://www.tosoh.com)!*