

# Industrial Coatings

## Technical Data Sheet



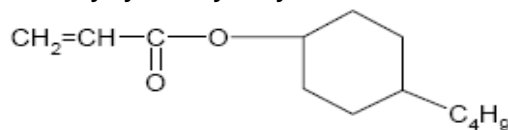
# Laromer<sup>®</sup> TBCH

**Product Description** Laromer<sup>®</sup> TBCH is an acrylic acid ester that is used as a reactive diluent for energy curable inks, OPV's, coatings and for manufacturing polymers.

**Key Features & Benefits**

- Excellent adhesion
- Low odor
- Excellent weatherability
- Low shrinkage

**Chemical Structure** 4-tert-butylcyclohexyl acrylate



## Properties

<b>Typical Properties</b>	Appearance	clear liquid
	Assay (gas chromatography)	≥ 90%
	Acidity, as acrylic acid (DIN EN ISO 2114, method B)	≤ 0.05 %
	Water content (K. Fischer, DIN 51777)	≤ 0.05%
	Color value, platinum cobalt scale (Hazen/APHA, DIN ISO 6271)	≤ 100
	Odor	pungent
	Density at 25°C (DIN 51757, method 4.3)	0.94 g/cm <sup>3</sup>
	Boiling point (DIN EN ISO 3405)	85°C
	Specific heat capacity at 30°C	1.71 kJ/ (kg K)
	Solidification point (per ISO DIS 3841)	3°C
	Refracting index n <sub>D</sub> at 20°C (per DIN EN ISO 489)	1.47
	Standard stabilization	~ 250 ppm MEHQ <sup>1</sup>
<b>Solubility of</b>	Laromer <sup>®</sup> TBCH in water	~ 0.05 g/l
	Water in Laromer TBCH	3.3 g/l

**Solubility, diluent tolerance** Can be mixed with most organic solvents.

<sup>1</sup>Monomethyl ether of hydroquinone  
These typical values should not be interpreted as specifications.

## Applications

Since it is a polymerizable acrylic compound, Laromer<sup>®</sup> TBCH is suitable for the manufacture of copolymers of, for example, acrylic or methacrylic acids and their salts, amides, esters, vinyl acetate, and styrene.

Laromer® TBCH is recommended for applications such as:

- Automotive refinish applications
- Interior/exterior general industrial, machine, or equipment metal coating applications
- Interior/exterior wood coatings for floor, furniture, or millwork applications
- Printing inks for flexographic, gravure, digital, or silk-screen applications
- Overprint varnishes for commercial, publication, or packaging applications

In energy curable coatings, Laromer® TBCH serves as both a crosslinking component and a reactive diluent. During curing, it becomes part of the polymer structure. Laromer® TBCH is a mono-functional acrylic monomer that improves the flexibility and reduces the hardness of coatings based on it.

### **Processing**

This product can be polymerized by the usual block, solution, suspension, and emulsion techniques. Removal of the stabilizer beforehand is generally not necessary. An excess of initiator can counteract its effect if needed.

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## **Safety**

### **General**

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State, and Local health and safety regulations, thorough ventilation of the workplace, good skin care, and wearing of protective goggles.

### **Safety Data Sheet**

All safety information is provided in the Safety Data Sheet for Laromer® TBCH.

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## **Important**

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### **U.S & Canada**

BASF Corporation  
24710 W Eleven Mile Road  
Southfield, MI 48033  
ph: 1(800) 231-7868  
fax:1(800) 392-7429  
Email: [Custserv\\_charlotte@basf.com](mailto:Custserv_charlotte@basf.com)  
Email: [edtech\\_info@basf.com](mailto:edtech_info@basf.com)  
[www.basf.us/dpsolutions](http://www.basf.us/dpsolutions)

### **Mexico**

BASF Mexicana, S.A. de C.V.  
Av. Insurgentes Sur # 975  
Col. Ciudad de los Deportes  
C.P. 03710  
Mexico, D.F.  
Phone: (52-55) 5325-2756  
Fax: (52-55) 5723-3011