



*Specialized in chemicals*

Hefei TNJ Chemical Industry Co.,Ltd.

B911 Xincheng Business Center,  
Qianshan Rd. Hefei 230022 China

Tel : (0086) 551 65418695

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnchem.com

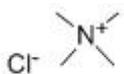
## Technical Data Sheet

# Tetramethylammonium chloride (TMAC)

### Product Information

Chemical Name	Tetramethylammonium chloride
CAS #	75-57-0
Formula	C <sub>4</sub> H <sub>12</sub> ClN
Molecular Weight	109.6
Synonyms	TMAC, Methanaminium, N,N,N-trimethyl-, chloride N,N,N-trimethylmethanaminium chloride

### Chemical Structure



### Description

TMAC is a kind of white crystal powder, Incompatible with strong oxidizing agents, water. Hygroscopic. It can be used as polarographic analysis reagents which is widely used in the electronics industry.

### Physical Properties

Appearance	White crystal powder
Melting point, °C .	>300 °C(lit.)
Density @ 20°C, g/cm <sup>3</sup>	1,17 g/cm <sup>3</sup>
Water Solubility	>60 g/100 ml (20 °C)

### Specification

Appearance	White crystal powder
Assay, %	≥ 99.00
Water, %	≤ 0.5

## Safety

Toxic if swallowed. Harmful in contact with skin. Irritating to eyes, respiratory system and skin.  
Always refer to the Material Safety Data Sheet (MSDS)

## Applications

1. It can be used as polarographic analysis reagents which is widely used in the electronics industry.
2. Tetramethylammonium chloride is the phase transfer catalyst in organic synthesis with its catalytic activity being stronger than triphenylphosphine and triethylamine. At room temperature, it is a white crystalline powder, and is volatile, irritant, and easy to absorb moisture. It is easily soluble in methanol, soluble in water and hot ethanol but insoluble in ether and chloroform. Being heated to above 230 °C causes its decomposition into trimethylamine and methyl chloride. Median lethal dose (mice, intraperitoneal) is around 25mg/kg. It is also used for the synthesis of liquid crystal epoxy compound, and Pope and polarographic analysis, as well as electronic industry.

## Packaging

25kg per bag,14MT/FCL without pallet

## Storage & Handling

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we has been advised of the possibility of such damages.*

## Hefei TNJ Chemical Industry Co.,Ltd.

B911 Xincheng Business Center  
Qianshan Road, Hefei  
230022 Anhui  
China

Tel : (0086) 551 5418695  
Fax: (0086) 551 5418697  
Email: info@tnjchem.com  
Site: www.tnjchem.com