

## MATERIAL SAFETY DATA SHEET (MSDS)

### Titanate TCA-KTTT

#### 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

<b>1.1</b>	<b>Production</b>	TCA-KTTT titanate
<b>1.2</b>	<b>Generic Description:</b>	Isopropyl tristearyl titanate
<b>1.3</b>	<b>Physical form:</b>	nubbles
<b>1.4</b>	<b>Color:</b>	White to yellowish
<b>1.5</b>	<b>Odor:</b>	Alcoholic
<b>1.6</b>	<b>NFPA Profile:</b>	<div>Health 3</div> <div>Flammability 1</div> <div>Instability/Reactivity 0</div>
<b>1.7</b>	<b>IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY</b>	
	<b>Manufacturer:</b>	Nanjing Capatue Chemical Co., Ltd
	<b>Address:</b>	No. 20 JiangJun Avenue, Jiangning Development Zone, Nanjing, Jiangsu Province, P. R. China P.C: 211100
	<b>Telephone:</b>	(+86-25)-86371193 Fax: (+86-25) 86371191
	<b>24Hour Emergency Telephone:</b>	(+86-25)-86371192
	<b>Connect with:</b>	Anhuanbu

#### 2. HAZARDS IDENTIFICATION

##### Acute Effects

<b>Eye:</b>	Direct contact may cause mild irritation.
<b>Skin:</b>	May cause moderate irritation.
<b>Inhalation:</b>	Vapor may irritate nose and throat. Vapor overexposure may cause drowsiness.
<b>Oral:</b>	Overexposure by ingestion may cause effects similar to those listed under repeated exposure.

##### Prolonged/Repeated Exposure Effects

<b>Skin:</b>	No known applicable information.
<b>Inhalation:</b>	No known applicable information.
<b>Oral:</b>	No known applicable information.

##### Signs and Symptoms of Overexposure

No known applicable information.

##### Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

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#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
68443-53-8	>99%	Isopropyl tristearyl titanate

The above components are hazardous as defined in 29 CFR 1910.1200.

#### 4. FIRST AID MEASURES

**Effects and Symptoms:**

<b>Effects of Overexposure:</b>	May cause mechanical irritation to eyes.
<b>Medical Conditions</b>	Persons with respiratory conditions may be at increased risk.

**Aggravated by Exposure:**

<b>Primary Route(s) of Entry:</b>	Inhalation or skin and eye contact.
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**Emergency First Aid:**

<b>Eye Contact:</b>	Flush eyes with water for at least 15 min. See physician if irritation persists.
<b>Inhalation:</b>	Remove to fresh air. If breathing is difficult give oxygen. See physician.
<b>Ingestion:</b>	None needed for small amounts. For large amounts, if conscious, give water to drink and induce vomiting. Call physician

<b>4.5 Skin Contact:</b>	Flush skin with soap and water for at least 15 min.
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#### 5. FIRE FIGHTING MEASURES

<b>5.1 Flash Point:</b>	180 °C
<b>5.2 Auto ignition Temperature:</b>	Non-flammable
<b>5.3 Flammability Limits in Air:</b>	Not determined.
<b>5.4 Extinguishing Media:</b>	Water, Dry Chemical, Foam, CO2
<b>5.5 Special Fire Fighting Procedures:</b>	Self-contained breathing apparatus and protective clothing.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>6.1 Personal Precautions:</b>	Avoid skin and eye contact
<b>6.2 Environmental Precautions:</b>	Prevent material from contaminating soil or entering sewerage and drainage systems.
<b>6.3 Spill response:</b>	Use appropriate NIOHS/MSHA approved respirator. Wear chemical gloves, goggles, and lab coat.

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Carefully contain spilled material. Deposit spilled material in appropriate waste container. Wash spill area with soap and water.

**Note:** See section 8 for Personal Protective Equipment for Spills. Call Capatue Chemical, if additional information is required.

#### 7. HANDLING AND STORAGE

**Handling:**

Use with adequate ventilation. Avoid contact with eyes. Wash thoroughly after handling and before mealtimes. Follow all MSDS and label precautions even after container is emptied since it may contain residual material.

**Storage:**

Store containers closed in ambient location.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Levels:** OSHA      ACGIH  
TWA PEL      TWA TLV

**Personal Protective**

**Eyes:** Safety glasses with side shields or goggles

**Skin:** Rubber gloves, wash at meals and end of shifts

**Respiratory Protection:** Use NIOSH/MSHA approved air purifying respirator as needed to control exposure.

**Ventilation:** Provide adequate general mechanical exhaust.

**Note:** These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document regarding the use of silicone-based materials in aerosol applications that has been developed by the silicone industry (<http://www.sehsc.com>) or contact the Capatue customer service department.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical Form:** Nubbles

**Color:** White to yellowish

**Odor:** Alcoholic

**Specific Gravity @ 20°C:** Not determined.

**Freezing/Melting Point:** Not determined.

**Evaporation Rate (Buac=1)** Not determined.

**Vapor Pressure @ 25°C:** Not determined.

**Vapor Density:** Not determined.

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<b>Solubility in Water:</b>	Insoluble
<b>Percent Volatile by Vol. (%):</b>	0
<b>Note:</b> The above information is not intended for use in preparing product specifications. Contact Capatue Chemical before writing specifications.	

#### 10. STABILITY AND REACTIVITY

<b>10.1 Chemical Stability:</b>	Stable
<b>10.2 Hazardous</b>	Hazardous polymerization will not occur.
<b>10.3 Polymerization:</b>	None
<b>10.4 Conditions to Avoid:</b>	Keep away from extreme heat, sparks, flame, and other ignition sources Incompatibility: Acids and strong oxidizing agents
<b>Hazardous Decomposition Products</b>	
None	

#### 11. TOXICOLOGICAL INFORMATION

**Skin Irritation (rabbit):** Minimal Irritant

**Primary Eye Irritation:** Mild irritant (rabbit) Average Draize score = 0.40

**Sensitization:** Non-sensitizer (guinea pig)

**Acute Oral Toxicity (rat):** Non-toxic, LD50 > 2 g/kg (rat)

#### 12. ECOLOGICAL INFORMATION

##### Environmental Fate and Distribution

Complete information is not yet available.

##### Environmental Effects

Complete information is not yet available.

##### Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

#### 13. DISPOSAL CONSIDERATIONS

##### **Method of Disposal:**

Dispose of in accordance with all applicable federal, state, and local regulations. Material may be sent to an approved landfill or licensed treatment, storage, and disposal facility.

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#### 14. TRANSPORT INFORMATION

<b>14.1</b>	<b>DOT Road Shipment Information (49 CFR 172.101)</b>	Not subject to DOT.
<b>14.2</b>	<b>Ocean Shipment (IMDG)</b>	Not subject to IMDG code.
<b>14.3</b>	<b>Air Shipment (IATA)</b>	Not subject to IATA regulations.

Call Capatue Chemical if additional information is required.

#### 15. REGULATORY INFORMATION

<b>TSCA Status:</b>	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
<b>EPA SARA Title III Chemical Listings</b>	
<b>Section 302 Extremely Hazardous Substances (40 CFR 355):</b>	None.
<b>Section 304 CERCLA Hazardous Substances (40 CFR 302):</b>	None.
<b>Section 311/312 Hazard Class (40 CFR 370):</b>	
Acute: Yes	
Chronic : Yes	
Fire: No	
Pressure: No	
Reactive: No	
<b>Section 313 Toxic Chemicals (40 CFR 372):</b>	
None present or none present in regulated quantities.	
Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.	

#### 16. OTHER INFORMATION

Prepared by:	Nanjing Capatue Chemical Co., Ltd
These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.	