

Tel: +86-21-67817854 Fax: +86-21-67817855

Address: ROOM CDEF , 9th Floor, Building D, Weijing Center Tower

NO.2337 GuDal Road, Minhang District, Shanghal, China

## **MATERIAL SAFETY DATA SHEET**

## 1.Chemical Product And Company Identification

Product name: Acetyl Tributyl Citrate

Manufacturer or Supplier name: Shanghai King Chemical Co,.Ltd

Address: ROOM CDEF, 9th Floor, Building D, Weijing Center Tower, NO.2337

GuDai Road, Minhang District, Shanghai, China 201199

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Active ingredient**

Acetyl Tributyl Citrate

## Composition

Component	CAS No.	Content by weight(%)
Acetyl Tributyl Citrate	6422-86-2	100

## 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

It may burn and produce an irritant gas when heated.

#### **Potential Health Effects**

**Eye:** May cause eye irritation.

**Skin:** Long time direct contact may cause skin redness and swelling and may cause skin irritation.

**Ingestion:** Nontoxic and no adverse reaction.

**Inhalation:** No harmful evidence. **Chronic:** No harmful evidence.

## 4. FIRST AID MEASURES

# **Description of necessary first-aid measures**

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

Fresh air, rest.

In case of skin contact



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Remove contaminated clothes. Rinse skin with plenty of water or shower.

#### In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

#### If swallowed

Rinse mouth. Give one or two glasses of water to drink.

## Most important symptoms/effects, acute and delayed

Inhalation can cause nausea and irritation of nose and throat. Contact of liquid with eyes or skin causes irritation. Ingestion can cause abdominal cramps, nausea and diarrhea. (USCG, 1999)

# Indication of immediate medical attention and special treatment needed, if necessary

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand-valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR as necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. /Esters and related compounds

## 5. FIRE FIGHTING MEASURES

#### Extinguishing media

Dry powder, carbon dioxide, foam. Water or foam may cause frothing.

#### Specific hazards arising from the chemical

Special Hazards of Combustion Products: Irritating vapors and toxic gases, such as carbon dioxide and carbon monoxide, may be formed when involved in fire. Behavior in Fire: Overheating of containers during fire can result in rupture. (USCG, 1999)

#### Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

#### **Environmental precautions**

Personal protection: chemical protection suit. Remove all ignition sources. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

## 7. HANDLING AND STORAGE



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#### Handling:

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

#### Conditions for safe storage, including any incompatibilities

Separated from strong oxidants, acids, alkalis and nitrates. Cool. Dry. Well closed.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.

## 8.EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Engineering Controls:**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## **Personal Protective Equipment**

#### **Eye/face protection**

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Respiratory protection**

Wear dust mask when handling large quantities.

#### Thermal hazards

no data available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	clear liquid
Colour	Liquid
Odour	Slight odor
Melting point ( °C )	30-34



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Boiling point ( °C )	400	
Density and/or relative density	0.981g/mLat 20°C(lit.)	
Flammability	Class IIIB Combustible Liquid: Fl.P. at or above 93.33°C.Combustible Gives off irritating or toxic fumes (or gases) in a fire.	
Lower and upper explosion limit / flammability limit	Lower flammable limit: 0.3% by volume at 474 deg F (245°C)	
Flash point	210°C	
Auto-ignition temperature	235°C	
Decomposition temperature	no data available	
pH	no data available	
Vapour pressure	no data available	
Relative vapour density	no data available	
Particle characteristics	no data available	

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under ordinary conditions of use and storage. **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.

**Hazardous Polymerization:** Dioctyl Terephthalate reacts with acids to liberate heat along with alcohols and acids. Strong oxidizing acids may cause a vigorous reaction that is sufficiently exothermic to ignite the reaction products. Heat is also generated by the interaction of esters with caustic solutions. Flammable hydrogen is generated by mixing with alkali metals and hydrides. Incompatible with nitrates .

# 11.TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

Oral: LD50 Rat oral >25 g/kg Inhalation: no data available Dermal: no data available **Skin corrosion/irritation** no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available



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#### Carcinogenicity

NTP: Reasonably anticipated to be a human carcinogen

## 12.ECOLOGICAL INFORMATION

## **Ecotoxicological toxicity**

When released into the atmosphere, it is attenuated by interaction with hydroxyl radicals and ozone produced by photochemical reactions.

#### Biodegradability

When released into the soil, it may hydrolyze and biodecompose.

#### Non-biodegradability

When released into water, it rapidly hydrolyzes to maleic acid.

#### Other harmful effects

The substance is harmful to the environment and special attention should be paid to the pollution of water bodies.

## 13.DISPOSAL CONSIDERATIONS

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

## **Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## 14.TRANSPORT INFORMATION

#### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

#### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

#### 14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available



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## **15.REGULATORY INFORMATION**

List of hazardous chemicals for which the material is not listed in each country.

## 16.OTHER INFORMATION

The data in this Material Safety Data Sheet relates only to the specific material designated Herein and does not relate to use in combination with any other material or in any process.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability 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 way shall the company 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 the company has been advised of the possibility of such damages.