

SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH) &
COMMISSION REGULATION (EU) 2015/830

Version 1
Product Name Acetyl tributyl citrate

Issue Date 14-Jul-2017
Revision date 14-Jul-2017

SECTION 1: Identification of the substance /mixture and of the company/undertaking

1.1. Product identifier

Product Name	Acetyl tributyl citrate
CAS No	77-90-7
EC No	201-067-0
EC name	Tributyl O-acetylcitrate

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use	Chemical basic material
Uses advised against	For industrial purposes only

1.3. Details of the supplier of the safety data sheet

Supplier	Jiangsu Licheng Chemical Co.,Ltd.
Address	Zhongshan 2nd Road,Coastal Economic Development Zone,Binhai,
Postal Code	Jiangsu,China / 224555
Phone	(86) 515-84388108
FAX	(86) 515-84388106
E-mail	licheng@lichengchem.com

Importer
Address
Postal Code
Phone
FAX
E-mail

1.4. Emergency telephone number

(86) 515-84388106

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as not hazardous.

2.2. Label elements

Symbols/Pictograms	None
Signal word	None
Hazard Statements	None
Precautionary Statements	P273 - Avoid release to the environment P501 - Dispose of contents/ container to an approved waste disposal plant
EU Specific Hazard Statements	None.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substance

Chemical Name	EC No	CAS No	Weight-%
---------------	-------	--------	----------

Acetyl tributyl citrate

201-067-0

77-90-7

100

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact

Wash off with plenty of water. If skin irritation persists, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguishing powder, CO₂, foam or water spray.

Unsuitable extinguishing media

Do not use straight streams.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors, such as carbon monoxide, carbon dioxide.

5.3. Advice for firefighters

Evacuate personnel to safe areas. Move containers from fire area if you can do it without risk. Cool drums with water spray. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Stay upwind. Ensure adequate ventilation, especially in confined areas.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8.

6.2. Environmental precautions

Local authorities should be advised if significant spillages cannot be contained. Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

6.4. Reference to other sections

See Section 7 for more information
See section 8 for more information
See section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use personal protection recommended in Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep locked up and out of reach of children. Store in accordance with local regulations.

7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

Derived No Effect Level (DNEL)

	Route	Type of effect	DNEL
For the worker	Inhalation	Systemic effects - Long-term	7.04 mg/m ³
	Dermal	Systemic effects - Long-term	2 mg/kg bw/day
For the general population	Inhalation	Systemic effects - Long-term	1.74 mg/m ³
	Dermal	Systemic effects - Long-term	1 mg/kg bw/day
	Oral	Systemic effects - Long-term	1 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Compartment	PNEC
Water	Freshwater: 0.022 mg/L Marine water: 0.002 mg/L
Sediment	Freshwater: 41.5 mg/kg sediment dw Marine water: 4.15 mg/kg sediment dw
STP	100 mg/kg
Soil	8.29 mg/kg soil dw
Secondary poisoning	1050 mg/kg food

8.2. Exposure controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations. Remove all sources of ignition.

Personal protective equipment

Eye/face protection	Avoid contact with eyes.
Hand Protection	Wear protective gloves.
Skin and body protection	No special technical protective measures are necessary.
Respiratory protection	Ensure adequate ventilation, especially in confined areas.

Environmental exposure controls

Do not allow into any sewer, on the ground or into any body of water

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	Liquid, oily
Color	Clear
Odor	No information available
Odor Threshold	Not determined
pH	Not determined
Melting point/freezing point	-80 °C
Boiling point / boiling range	418 °C
Flash point	204 °C
Evaporation rate	Not determined
Flammability (solid, gas)	Not flammable
Flammability Limit in Air	Not applicable
Vapor Pressure	Not determined
Vapor density	Not applicable
Density	1.05 g/cm (25 °C)
Relative density	Not determined
Bulk density	Not determined
Water solubility	Insoluble in water
Partition coefficient (LogPow)	4.29
Autoignition temperature	Not applicable
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic viscosity	Not determined
Explosive properties	Not an explosive
Oxidizing properties	Not determined

9.2. Other information

No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity	Oral LD50	Dermal LD50	Inhalation LC50
Chemical Name Acetyl tributyl citrate (CAS #: 77-90-7)	> 31500 mg/kg bw rat	> 1000 mg/kg bw rabbit	-

Skin corrosion/irritation
Non-irritating to the skin.

Serious eye damage/eye irritation
No eye irritation.

Sensitization
No sensitization responses were observed.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Reproductive toxicity
No information available.

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Aspiration hazard
No information available.

SECTION 12: Ecological information

12.1. Toxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Acetyl tributyl citrate (CAS #: 77-90-7)	74.4 mg/L/72 h	38 - 60 mg/L/96 h	> 1 mg/L/24 h

12.2. Persistence and degradability
28 d, 82% degradation
Inherently biodegradable.

12.3. Bioaccumulative potential
BCF = 31.57.

12.4. Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment
PBT/vPvB assessment information is not available as chemical safety assessment not conducted.

12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14: Transport information

14.1. UN number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
14.4. Packing group	Not regulated
14.5. Environmental hazards	Non-marine pollutant
14.6. Special precautions for user	No information available
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Component	EINECS/ELINCS	SVHC candidates	RESTRICTIONS - REACH TITLE VIII
Acetyl tributyl citrate 77-90-7 (100)	X	-	-

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

International Inventories

Component	TSCA	DSL/NDSL	ENCS	IECSC	KECL	PICCS	AICS
Acetyl tributyl citrate 77-90-7 (100)	X	X	X	X	X	X	X

"-" Not Listed

"X" Listed

15.2. Chemical safety assessment

No information available.

SECTION 16: Other information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Issue Date	14-Jul-2017
Revision date	14-Jul-2017
Revision Note	Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average)

STEL - STEL (Short Term Exposure Limit)

Ceiling - Maximum limit value

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Key literature references and sources for data

ECHA: <http://echa.europa.eu/>

IFA GESTIS: [http://gestis-en.itrust.de/nxt/gateway.dll?f=templates\\$fn=default.htm\\$vid=gestiseng:sdbeng](http://gestis-en.itrust.de/nxt/gateway.dll?f=templates$fn=default.htm$vid=gestiseng:sdbeng)

HSDB: <http://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

----- End of Safety Data Sheet -----