

Tributyl O-Acetylcitrate

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

1.1 Product identifier

Product name:	Tributyl O-Acetylcitrate
CAS Number:	77-90-7
EC Number:	201-067-0
REACH registration:	01-2119457465-36-xxxx

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

Identified use: Industrial application cosmetics pharmaceuticals paint plasticiser

1.3 Details of the supplier of the safety data sheet

Company name:	East Harbour Group Ltd 20 Clough Road, Severalls Industrial Park Colchester, Essex, CO4 9QS United Kingdom
Telephone:	+44 (0) 333 242 0100
Email:	info@eastharbourgroup.com

1.4 Emergency telephone number

Emergency telephone: 0800 246 1274

Section 2: Hazardous identification

2.1 Classification of the substance or mixture

Physical hazards: not classified

Health hazards: not classified

Environmental hazards: not classified

Classification (67/548/EEC or 1999/45/EC): -

Environmental: the product is not expected to be hazardous to the environment

2.2 Label elements

EC number: 201-067-0

Hazard statements: NC Not classified

2.3 Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

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Section 3: Composition/information on ingredients

3.2 Mixtures

CAS #	Content (W/W)	Ingredients
77-90-7	-	Tributyl O-Acetylcitrate

Chemical name: Tributyl O-Acetylcitrate

Common name / synonyms: -

Section 4: First aid measures

4.1 Description of first aid measures

In case of skin contact: Wash skin thoroughly with soap and water. Rinse with water. Get medical attention if any discomfort continues.

In case of eye contact: Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Rinse with water. Get medical attention if any discomfort continues.

If swallowed: Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues

If inhaled: Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: prolonged skin contact may cause redness and irritation

Eye contact: may cause temporary eye irritation

4.3 Indication of any immediate medical attention and special treatment needed

No specific recommendations. If in doubt, get medical attention promptly.

Section 5: Fire-fighting measures

5.1 Fire Fighting Media and Instructions:

Suitable extinguishing media: Use fire-extinguishing media suitable for the surrounding fire

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire

5.2 Special hazards arising from the substance or mixture

Specific hazards: fire or high temperatures create: oxides of the following substances: carbon

Hazardous combustion products: oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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5.3 Advice for firefighters

Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Contain and collect extinguishing water.

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with eyes and prolonged skin contact. Provide adequate ventilation. Avoid inhalation of vapours.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Avoid inhalation of vapours and spray/mists. Avoid contact with skin and eyes. Provide adequate ventilation. Good personal hygiene procedures should be implemented. Avoid contact with skin, eyes and clothing. Wash skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly-closed, original container in a dry and cool place. Store at temperatures above 30C/86F.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Ingredient comments: no exposure limits known for ingredients.

8.2 Exposure controls



Appropriate engineering controls: provide adequate general and local exhaust ventilation.

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8.3 Personal protective equipment

Eye/face protection: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Skin protection: The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection: Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. EN 136/140/145/143/14

Hygiene measures: Wash hands after handling. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Eye wash facilities and emergency shower must be available when handling this product.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Colourless to pale yellow. Translucent
Physical State	Liquid
Odor	Characteristic
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-80 C
Boiling Point/Range	331 C @ 976.4 hPa
Flash Point	217.9 C
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Explosion Limits	No information available
Vapor Pressure	0.049 Pa @ 25 C
Vapor Density	No information available
Relative Density	1.046 @ 25 C
Bulk Density	No information available
Water Solubility	Insoluble in water
Solubility in other solvents	Soluble in alcohols, ether
Partition Coefficient	log Pow: 4.86 OECD 107
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	40.4 mm ² /s @ 20 C

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Section 10: Stability and Reactivity

10.1 Reactivity

There are no known reactivity hazards associated with this product.

10.2 Chemical Stability

Stable at normal ambient temperatures and when used as recommended.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, no hazardous reactions will occur.

10.4 Conditions to avoid

When exposed to air, this product will absorb moisture.

10.5 Incompatible materials

No information available

10.6 Hazardous decomposition products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Section 11: Toxicological Information

Product Information**11.1 Toxicological effects:**

Acute toxicity oral (LD50 mg/kg): 31,500.0

Species: Rat

Acute toxicity dermal (LD50): LD50>1000 mg/kg, dermal, rabbit

Skin corrosion/irritation: not irritating, rabbit

Serious eye damage/irritation: may cause temporary eye irritation

Respiratory sensitisation: no information available

Skin sensitisation: not sensitising. Guinea pig maximisation test (GPMT)

Germ cell mutagenicity

Genotoxicity – in vitro: negative. Ames test

Genotoxicity – in vivo: negative

Carcinogenicity: no evidence of carcinogenicity in animal studies

Reproductive toxicity

Reproductive toxicity – fertility: no information available

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Specific target organ toxicity – single exposure: STOT single exposure: no information available

Specific target organ exposure – repeated exposure: no information available

Aspiration hazard: no information available

Inhalation: may cause respiratory system irritation

Ingestion: may cause discomfort if swallowed

Skin contact: liquid may irritate skin

Eye contact: may cause temporary eye irritation

Section 12: Ecological Information

12.1 Toxicity

Ecotoxicity: the product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment

Acute toxicity – fish: LC50, 96 hours: 38 mg/l, Lepomis macrochirus (bluegill) OECD 203

Acute toxicity- aquatic invertebrates: EC50, 24 hours:>1 mg/l, Daphnia magna OECD 202

Acute toxicity – aquatic plants: EC50, 72 hours: 11.5 mg/l, Desmodesmus subspicatus OECD 201

Acute toxicity microorganisms: EC0, 3 hours: 1000 mg/l, Activated sludge

Chronic toxicity – aquatic invertebrates: NOEC, 21 days:>=1.11 mg/l, Daphnia magna

Persistence and degradability: the product is biodegradable

Biodegradation: water – degradation 82%: 28 days OECD 302

Bioaccumulative potential: BCF: 31.57

Partition coefficient: log Pow: 4.86 OECD 107

Mobility in soil: the product is insoluble in water

Surface tension: 54.6 mN/m @ 20 C

Results of PBT and vPvB assessment: this substance is not classified as PBT or vPvB according to current EU criteria

Section 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal of substance:

Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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Section 14: Transport Information

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

UN number: no information available

UN proper shipping name: no information available

Transport hazard classes: no information available

Packing group: no information available

Environmentally hazards: environmentally hazardous substance/marine pollutant: no

Special precautions for user: no information available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: no information required

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Section 15: Regulatory Information

National regulations: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015

Guidance: CHIP for everyone HSG228

Approved Classification and Labelling Guide (Sixth edition) L131

EU - EINECS/ELINCS All the ingredients are listed or exempt.

Canada - DSL/NDSL All the ingredients are listed or exempt. DSL

US - TSCA All the ingredients are listed or exempt.

Australia - AICS All the ingredients are listed or exempt.

Korea - KECI All the ingredients are listed or exempt.

China - IECSC All the ingredients are listed or exempt.

Philippines – PICCS All the ingredients are listed or exempt.

New Zealand - NZIOC All the ingredients are listed or exempt.