

Safety data sheet

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

1.1. Product identifier

Code: 43070
Product name: T-QUAT CTA CONC
Chemical name and synonym: Cetrimonium Chloride sol. 30%

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

Intended use: Cationic surfactant, conditioning agent used in cosmetic .

1.3. Details of the supplier of the safety data sheet

Name: Zschimmer & Schwarz Italiana S.p.a.
Full address: via A. Ariotto, 1/C
District and Country: 13038 Tricerro Italia (VC)
Tel. 0039 0161 808111
Fax 0039 0161 801002
e-mail address of the competent person responsible for the Safety Data Sheet: e.merlo@zschimmer-schwarz.com

1.4. Emergency telephone number

For urgent inquiries refer to: 0039 0161 808111 / 0039 3316593305

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

Acute Tox. 4 H312
Skin Corr. 1C H314
Aquatic Acute 1 H400

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols: C-N

R phrases: 21/22-34-50

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

T-QUAT CTA CONC**SECTION 2. Hazards identification. ... / >>**

Hazard statements:

H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.

Precautionary statements:

P273	Avoid release to the environment.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P303+P361+P353	IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.

Contains: Cetrimonium Chloride

2.3. Other hazards.

Information not available.

SECTION 3. Composition/information on ingredients.**3.1. Substances.**

Information not relevant.

3.2. Mixtures.**Contains:**

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
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Cetrimonium Chloride

CAS.	112-02-7	27 - 30	C R34, Xn R21/22, N R50
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EC.	203-928-6		
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Reg. no.	01-2119970558-23-XXXX		
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Acute Tox. 3 H311, Acute Tox. 4 H302, Skin Corr. 1C H314,
Eye Dam. 1 H318, Aquatic Acute 1 H400 M=1,
Aquatic Chronic 1 H410

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F),
N = Dangerous for the Environment(N)

SECTION 4. First aid measures.**4.1. Description of first aid measures.**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

In case of inhalation of decomposition products after burning, symptoms can be delayable. It is advisable to keep the person under medical control for 48 hours. None specific treatments.

SECTION 5. Firefighting measures.**5.1. Extinguishing media.**

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

T-QUAT CTA CONC**SECTION 5. Firefighting measures. ... / >>****UNSUITABLE EXTINGUISHING EQUIPMENT**

None in particular.

5.2. Special hazards arising from the substance or mixture.**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Do not breathe combustion products.

Decomposition products can be: NO_x, CO₂, CO and halogenated compounds

5.3. Advice for firefighters.**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.**6.1. Personal precautions, protective equipment and emergency procedures.**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10.

Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.**7.1. Precautions for safe handling.**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.**8.1. Control parameters.****Regulatory References:**

United Kingdom

Éire

OEL EU

TLV-ACGIH

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended). Code of Practice Chemical Agent Regulations 2011.

Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.

ACGIH 2012

T-QUAT CTA CONC**SECTION 8. Exposure controls/personal protection. ... / >>**

None exposition value known

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

It is recommended to use nitrilic gum gloves, 0.4 mm thickness, 480 minutes of permeation time, level 6

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

Appearance	liquid
Colour	from colourless to yellow
Odour	characteristic
Odour threshold.	Not available.
pH.	5.0 - 9.0 (sol. 10%, 20°C)
Melting point / freezing point.	> -4 °C.
Initial boiling point.	100 °C.
Boiling range.	Not available.
Flash point.	> 939 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	not flammable
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	23 hPa (20°C)
Vapour density	Not available.
Relative density.	approx. 0.97 g/cm3 (20°C)
Solubility	soluble in water
Partition coefficient: n-octanol/water	3.23 (estimated value)
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	18 cps (dinamic)
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information.

Molecular weight. 320

T-QUAT CTA CONC**SECTION 10. Stability and reactivity.****10.1. Reactivity.**

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials.

Strong oxidants, anionic surfactants.

10.6. Hazardous decomposition products.

HCl.

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

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute effects: cutaneous absorption of this product is harmful. Upon contact with skin, this product may irritate it, causing an increase in skin temperature, swelling and itchiness.

This product is corrosive and causes abrasions of skin surface, accompanied by rubefaction, warmth and sting. In the most serious cases, small vesicles appear, which cause strong sting and pain. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. Possible vapours are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours.

Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness.

If swallowed, it may cause mouth, throat and oesophagus burns; sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

Highly irritant to eye (rabbit, OECD 405); Non sensitizing (Guinea pig, OECD 406); Corrosive to skin (rabbit, OECD 404)

Cetrimonium Chloride

LD50 (Oral).

2300 mg/kg (ATE mix, calculated)

LD50 (Dermal).

1760 mg/kg (ATE mix, calculated)

SECTION 12. Ecological information.

This product is dangerous for the environment and highly toxic for aquatic organisms.

12.1. Toxicity.

Cetrimonium Chloride

LC50 - for Fish.

0,71 mg/l Brachydanio rerio (OECD 203)

EC50 - for Crustacea.

0,09 mg/l Daphnia magna (OECD 202)

EC50 - for Algae / Aquatic Plants.

0,18 mg/l/72h Selenastrum capricornutum (OECD 201)

12.2. Persistence and degradability.

Readily biodegradable, > 60%. This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer

12.3. Bioaccumulative potential.

No bioaccumulo

T-QUAT CTA CONC**SECTION 12. Ecological information. ... / >>****12.4. Mobility in soil.**

Information not available.

12.5. Results of PBT and vPvB assessment.

No PBT/vPvB

12.6. Other adverse effects.

None

SECTION 13. Disposal considerations.**13.1. Waste treatment methods.**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Avoid littering. Do not contaminate soil, sewers and waterways.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information.

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations.

These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID Class: 8 UN: 1760
Packing Group: III
Label: 8
Nr. Kemler: 80
Limited Quantity: 5 L
Tunnel restriction code: (E)
Proper Shipping Name: CORROSIVE LIQUID, N.O.S.

**Carriage by sea (shipping):**

IMO Class: 8 UN: 1760
Packing Group: III
Label: 8
EMS: F-A, S-B
Marine Pollutant: YES
Proper Shipping Name: CORROSIVE LIQUID, N.O.S.

**Transport by air:**

IATA: 8 UN: 1760
Packing Group: III
Label: 8
Cargo:
Packaging instructions: 856 Maximum quantity: 60 L
Pass.:
Packaging instructions: 852 Maximum quantity: 5 L
Special Instructions: A3, A803
Proper Shipping Name: CORROSIVE LIQUID, N.O.S.
For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.



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

Seveso category. 9i

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.
Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
H311	Toxic in contact with skin.
H302	Harmful if swallowed.
H302+H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R21/22	HARMFUL IN CONTACT WITH SKIN AND IF SWALLOWED.
R34	CAUSES BURNS.
R50	VERY TOXIC TO AQUATIC ORGANISMS.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP

T-QUAT CTA CONC**SECTION 16. Other information. ... / >>**

- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
9. The Merck Index. - 10th Edition
10. Handling Chemical Safety
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. INRS - Fiche Toxicologique (toxicological sheet)
13. Patty - Industrial Hygiene and Toxicology
14. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
15. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:

01 / 11 / 14 / 15.