

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

1.1 Product identifier

Catalogue No. 814088
Product name Tributylmethylammonium chloride (75% solution in water) for synthesis
REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

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

Identified uses Chemical for synthesis
For additional information on uses please refer to the Merck Chemicals portal (www.merck-chemicals.com).

1.3 Details of the supplier of the safety data sheet

Company **Swadesh Life Science**
H-103, Sumel 7, Near Soni ni chali
BRTS, Rakhiyal,
Ahmedabad, Gujarat, India

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4, Oral, H302
Acute toxicity, Category 4, Dermal, H312
Skin irritation, Category 2, H315
Eye irritation, Category 2, H319
Specific target organ toxicity - single exposure, Category 3, Respiratory system, H335
For the full text of the H-Statements mentioned in this Section, see Section 16.

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

Xn	Harmful	R21/22
Xi	Irritant	R36/37/38

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) Hazard pictograms



Signal word

Warning

Hazard statements

H302 + H312 Harmful if swallowed or in contact with skin H315
Causes skin irritation.

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Reduced labelling (≤ 125 ml)

Hazard pictograms



Signal word
Warning

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

3.1 Substance

not applicable

3.2 Mixture

Formula $(C_4H_9)_3N(Cl)CH_3$

Hazardous components (REGULATION (EC) No 1272/2008)

Chemical Name :- methyltributylammonium chloride

(Concentration) :- ($\geq 50\%$ - $\leq 100\%$)

CAS-No. :- 56375-79-2

Hazardous components (1999/45/EC)

Chemical Name :- methyltributylammonium chloride

(Concentration) :- ($\geq 50\%$ - $\leq 100\%$)

CAS-No. :- 56375-79-2

SECTION 4. First aid measures

4.1 Description of first aid measures After

inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing. Consult a physician.

After eye contact: rinse out with plenty of water. Call in ophthalmologist.

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

4.3 Indication of any immediate medical attention and special treatment needed No information available.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Foam, Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

Hydrogen chloride gas, nitrogen oxides

5.3 Advice for firefighters

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. Remove container from danger zone and cool with water.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid substance contact. Do not breathe vapours, aerosols. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions Do not empty into drains.

6.3 Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions Tightly closed.

Recommended storage temperature see product label.

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

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Safety glasses

Hand protection

full contact:

Glove material:	natural latex
Glove thickness:	0,6 mm
Break through time:	> 480 min

splash
contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 30 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 706 Lapren® (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment

protective clothing

MATERIAL SAFETY DATA SHEET

Respiratory protection required when vapours/aerosols are generated.

Empfohlener Filtertyp: filter ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls
Do not empty into drains.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Colour	yellow
Odour	weakly amine-like
Odour Threshold	No information available.
pH	8 at 20 °C
Melting point	-33 °C
Boiling point/boiling range	84 - 85 °C at 133 hPa
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	7,9 hPa at 25 °C
Relative vapour density	No information available.
Relative density	0,96 g/cm ³ at 20 °C
Water solubility	at 20 °C soluble
Partition coefficient: noctanol/water	No information available.
Auto-ignition temperature	No information available.

Decomposition temperature	No information available.
Viscosity, dynamic	55,9 mPa.s at 25 °C
Explosive properties	Not classified as explosive.
Oxidizing properties	none

9.2 Other data

none

SECTION 10. Stability and reactivity

10.1 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.2 Possibility of hazardous reactions

Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitosamines!

Violent reactions possible

with: strong oxidising agents

10.3 Conditions to avoid no

information available

10.4 Incompatible materials no

information available

SECTION 11. Toxicological information

11.1 Information on toxicological effects Mixture

Acute oral toxicity

absorption

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute inhalation toxicity

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:., damage of respiratory tract

Acute dermal toxicity

absorption

Skin irritation

Mixture causes skin irritation.

Eye irritation

Mixture causes serious eye irritation.

Sensitisation

This information is not available.

Germ cell mutagenicity This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

Specific target organ toxicity - single exposure

Mixture may cause respiratory irritation.

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

11.2 Further information

Under given conditions, contact with nitrites or nitric acid can lead to the formation of nitrosamines, which have shown themselves to be carcinogenic in animal experiments.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Mixture

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

SECTION 13. Disposal considerations

Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

