acc. to Regulation (EC) No. 1907/2006 (REACH)

# Tetradecyltrimethylammonium bromide ≥96 %, extra pure



Replaces version of: 2022-08-17

Version: (4)



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

#### **Product identifier** 1.1

Identification of the substance **Tetradecyltrimethylammonium bromide** ≥96

%, extra pure

Article number 7452

EC number 214-291-9 CAS number 1119-97-7 **MTAB** 

Alternative name(s)

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

> Laboratory chemical Laboratory and analytical use

Uses advised against: Do not use for products which come into contact

with foodstuffs. Do not use for private purposes (household). Food, drink and animal feeding-

stuffs.

#### 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Relevant identified uses:

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data Department Health, Safety and Environment

sheet:

#### e-mail (competent person): sicherheit@carlroth.de

#### 1.4 **Emergency telephone number**

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

United Kingdom (en) Page 1 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
3.2	Skin corrosion/irritation		Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.8R	Specific target organ toxicity - single exposure (respirat- ory tract irritation)		STOT SE 3	H335
3.9	Specific target organ toxicity - repeated exposure		STOT RE 2	H373
4.1A	Hazardous to the aquatic environment - acute hazard		Aquatic Acute 1	H400
4.1C	Hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16

#### The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure. Spillage and fire water can cause pollution of watercourses.

#### 2.2 Label elements

#### Labelling

Signal word Danger

## **Pictograms**

GHS05, GHS07, GHS08, GHS09









## **Hazard statements**

H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation
H373	May cause damage to organs (gastro-intestinal tract) through prolonged or re-
	peated exposure (if swallowed)
H410	Very toxic to aquatic life with long lasting effects

#### **Precautionary statements**

#### **Precautionary statements - prevention**

P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment
P280	Wear protective gloves/eye protection

United Kingdom (en) Page 2 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452

#### **Precautionary statements - response**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P310 Immediately call a POISON CENTER/doctor

#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0.1\%$ .

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Name of substance Tetradecyltrimethylammonium bromide

Molecular formula  $C_{17}H_{38}BrN$  Molar mass  $336,4\,^{9}I_{mol}$  CAS No 1119-97-7 EC No 214-291-9

#### Substance, Specific Conc. Limits, M-factors, ATE

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	M-factor (acute) = 100	>300 <sup>mg</sup> / <sub>kg</sub>	oral

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

#### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

#### Following eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Call a doctor.

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

Vomiting, Risk of blindness, Risk of serious damage to eyes, Irritation, Cough, Dyspnoea

United Kingdom (en) Page 3 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### **Tetradecyltrimethylammonium bromide ≥96 %, extra pure**

article number: 7452

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

none

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings! water, foam, alcohol resistant foam, dry extinguishing powder, ABC-powder

#### Unsuitable extinguishing media

water jet

#### 5.2 Special hazards arising from the substance or mixture

Combustible.

#### **Hazardous combustion products**

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen bromide (HBr)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

#### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe dust.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

#### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains. Take up mechanically.

#### Advice on how to clean up a spill

Take up mechanically. Control of dust.

#### Other information relating to spills and releases

Place in appropriate containers for disposal.

United Kingdom (en) Page 4 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

#### 7.1 **Precautions for safe handling**

Provision of sufficient ventilation. Avoid dust formation.

#### Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

#### Measures to protect the environment

Avoid release to the environment.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

#### Conditions for safe storage, including any incompatibilities 7.2

Store in a dry place. Hygroscopic solid.

#### **Incompatible substances or mixtures**

Observe hints for combined storage.

#### Protect against external exposure, such as

humidity

#### Consideration of other advice:

#### **Ventilation requirements**

Use local and general ventilation.

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

#### 7.3 Specific end use(s)

No information available.

# SECTION 8: Exposure controls/personal protection

#### 8.1 **Control parameters**

#### **National limit values**

#### **Occupational exposure limit values (Workplace Exposure Limits)**

Coun try	Name of agent	CAS No	Identifi- er	TWA [mg/ m³]	STEL [mg/ m³]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
GB	dust		WEL	10			i	EH40/2005
GB	dust		WEL	4			r	EH40/2005

**Notation** 

Ceiling value is a limit value above which exposure should not occur Inhalable fraction Ceiling-C

Respirable fraction

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-

minute period (unless otherwise specified)
Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) TWA

United Kingdom (en) Page 5 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### **Tetradecyltrimethylammonium bromide ≥96 %, extra pure**

article number: 7452

#### **Human health values**

Relevant DNELs and other threshold levels						
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time		
DNEL	0,05 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects		
DNEL	0,4 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects		

#### **Environmental values**

Relevant PNECs and other threshold levels						
End- point	Threshold level	Organism	Environmental com- partment	Exposure time		
PNEC	0,026 <sup>µg</sup> / <sub>l</sub>	aquatic organisms	freshwater	short-term (single instance)		
PNEC	0,003 <sup>µg</sup> / <sub>l</sub>	aquatic organisms	marine water	short-term (single instance)		
PNEC	0,19 <sup>mg</sup> / <sub>l</sub>	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)		

#### 8.2 Exposure controls

#### Individual protection measures (personal protective equipment)

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





Use safety goggle with side protection.

#### Skin protection





#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

type of material

NBR (Nitrile rubber)

material thickness

>0,11 mm

United Kingdom (en) Page 6 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452

#### breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

#### **Respiratory protection**





Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

## **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state solid

Colour not determined

Odour odourless

Melting point/freezing point 245 – 250 °C (ECHA)

Boiling point or initial boiling point and boiling

range

not determined

Flammability this material is combustible, but will not ignite

readily

Lower and upper explosion limit not determined Flash point not applicable

Auto-ignition temperature 210 °C at 0,3 bar (ECHA)

Decomposition temperature not relevant

pH (value) 5 – 7 (in aqueous solution: 50  $^{9}$ /<sub>I</sub>, 20 °C)

Kinematic viscosity not relevant

Solubility(ies)

Water solubility  $200 \, ^{9}/_{1}$  at  $20 \, ^{\circ}$ C (ECHA)

Partition coefficient

Partition coefficient n-octanol/water (log value): 2,2 (pH value: ~7, 25 °C) (ECHA)

Vapour pressure not determined

Density and/or relative density

United Kingdom (en) Page 7 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452

 $0.5 \, {\rm g/_{cm^3}}$  at 20 °C (ECHA) Density

Relative vapour density Information on this property is not available.

No data available. Particle characteristics

Other safety parameters

Other safety characteristics:

Oxidising properties none

9.2 Other information

> Information with regard to physical hazard hazard classes acc. to GHS (physical hazards): not relevant

classes:

≤42 <sup>mN</sup>/<sub>m</sub> (21 °C) (ECHA) Surface tension

SECTION 10: Stability and reactivity

10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical stability

Moisture-sensitive. Hygroscopic solid.

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser,

Release of an acute toxic gas: Nitrate, Nitrites, Nitric acid

10.4 Conditions to avoid

Protect from moisture.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

**Acute toxicity** 

Harmful if swallowed.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

United Kingdom (en) Page 8 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)

# ROTH

#### **Tetradecyltrimethylammonium bromide ≥96 %, extra pure**

article number: 7452

Shall not be classified as a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure

May cause damage to organs (gastro-intestinal tract) through prolonged or repeated exposure (if swallowed).

Hazard category	Target organ	Exposure route
2	gastro-intestinal tract	if swallowed

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

#### Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

vomiting, nausea, gastrointestinal complaints

#### If in eyes

Causes serious eye damage, risk of blindness

#### If inhaled

Irritation to respiratory tract, cough, Dyspnoea

#### • If on skin

causes skin irritation

#### Other information

none

#### 11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq$  0,1%.

#### 11.3 Information on other hazards

There is no additional information.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

United Kingdom (en) Page 9 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### **Tetradecyltrimethylammonium bromide ≥96 %, extra pure**

article number: 7452

#### Aquatic toxicity (acute)

Endpoint	Value	Species	Source	Exposure time
LC50	>1,81 <sup>mg</sup> / <sub>l</sub>	fish	ECHA	96 h
ErC50	5,38 <sup>µg</sup> / <sub>l</sub>	algae	ECHA	72 h

#### **Aquatic toxicity (chronic)**

Endpoint	Value	Species	Source	Exposure time
EC50	0,28 <sup>mg</sup> / <sub>l</sub>	microorganisms	ECHA	30 min

#### 12.2 Persistence and degradability

Theoretical Oxygen Demand (without nitrification):  $2,449 \, ^{mg}/_{mg}$  Theoretical Oxygen Demand (with nitrification):  $2,639 \, ^{mg}/_{mg}$  Theoretical Carbon Dioxide:  $2,224 \, ^{mg}/_{mg}$ 

#### 12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	2,2 (pH value: ~7, 25 °C) (ECHA)
---------------------------	----------------------------------

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq$  0,1%.

#### 12.7 Other adverse effects

Data are not available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

United Kingdom (en) Page 10 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)

# ROTH

#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Properties of waste which render it hazardous

**HP 4** irritant - skin irritation and eye damage

**HP 5** specific target organ toxicity (STOT)/aspiration toxicity

**HP 6** acute toxicity

**HP 14** ecotoxic

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

# **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADRRID UN 3077
IMDG-Code UN 3077
ICAO-TI UN 3077

#### 14.2 UN proper shipping name

ADRRID ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S.

IMDG-Code ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S.

ICAO-TI Environmentally hazardous substance, solid,

n.o.s.

Technical name

Tetradecyltrimethylammonium bromide

#### 14.3 Transport hazard class(es)

ADRRID 9
IMDG-Code 9
ICAO-TI 9

#### 14.4 Packing group

ADRRID III
IMDG-Code III
ICAO-TI III

#### **14.5 Environmental hazards** hazardous to the aquatic environment

#### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

#### 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

#### 14.8 Information for each of the UN Model Regulations

United Kingdom (en) Page 11 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452



# Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S.

Particulars in the transport document UN3077, ENVIRONMENTALLY HAZARDOUS SUB-

STANCE, SOLID, N.O.S., (Tetradecyltrimethylam-

monium bromide), 9, III, (-)

Classification code M7

Danger label(s) 9, "Fish and tree"

Environmental hazards yes (hazardous to the aquatic environment)

Special provisions (SP) 274, 335, 375, 601

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 kg
Transport category (TC) 3
Tunnel restriction code (TRC) -

Hazard identification No 90

Emergency Action Code 2Z

# Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

Classification code M7

**Danger label(s)** 9, "Fish and tree"

Environmental hazards Yes

Hazardous to water

**Special provisions (SP)** 274, 335, 375, 601

Excepted quantities (EQ)E1Limited quantities (LQ)5 kgTransport category (TC)3Hazard identification No90

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S.

Particulars in the shipper's declaration UN3077, ENVIRONMENTALLY HAZARDOUS SUB-

STANCE, SOLID, N.O.S., (Tetradecyltrimethylam-

monium bromide), 9, III

Marine pollutant yes (hazardous to the aquatic environment), (Tetradecyltri-

methylammonium bromide)

Danger label(s) 9, "Fish and tree"

United Kingdom (en) Page 12 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452



Stowage category

Special provisions (SP) 274, 335, 966, 967, 969

Excepted quantities (EQ) Limited quantities (LQ) 5 kg **EmS** F-A, S-F

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Environmentally hazardous substance, solid,

n.o.s.

Α

Particulars in the shipper's declaration UN3077, Environmentally hazardous substance,

solid, n.o.s., (Tetradecyltrimethylammonium bromide), 9, III

**Environmental hazards YES** (hazardous to the aquatic environment)

Danger label(s) 9, "Fish and tree"

Special provisions (SP) A97, A158, A179, A197, A215

Excepted quantities (EQ) E1 Limited quantities (LQ) 30 kg

# SECTION 15: Regulatory information

# Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

#### **Seveso Directive**

2012/18/EU (Seveso III)				
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
E1	environmental hazards (hazardous to the aquatic environment, cat. 1)	100	200	56)

#### Notation

Hazardous to the Aquatic Environment in category Acute 1 or Chronic 1

#### **Deco-Paint Directive**

VOC content	0 %
VOC content	0 g/l

United Kingdom (en) Page 13 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### **Tetradecyltrimethylammonium bromide ≥96 %, extra pure**

article number: 7452

#### **Industrial Emissions Directive (IED)**

VOC content	0 %
VOC content	0 <sup>g</sup> / <sub>l</sub>

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

#### **Water Framework Directive (WFD)**

#### List of pollutants (WFD)

Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Tetradecyltrimethylammonium bromide	Organohalogen compounds and substances which may form such compounds in the aquatic envir- onment		a)	

#### Legend

a)

Indicative list of the main pollutants

#### Regulation on the marketing and use of explosives precursors

not listed

#### **Regulation on drug precursors**

not listed

#### Regulation on substances that deplete the ozone layer (ODS)

not listed

#### Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

#### Regulation on persistent organic pollutants (POP)

not listed

#### National regulations(GB)

#### List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

#### Restrictions according to GB REACH, Annex 17

not listed

#### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

United Kingdom (en) Page 14 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452

#### **National inventories**

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
NZ	NZIoC	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

AIIC Australian Inventory of Industrial Chemicals
CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)
DSL Domestic Substances List (DSL)
ECSI EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC Inventory of Existing Chemical Substances Produced or Imported in China
KECI Korea Existing Chemicals Inventory
NCI National Chemical Inventory
NZIOC New Zealand Inventory of Chemicals
REACH Reg.
REACH registered substances
TCSI Taiwan Chemical Substance Inventory
TSCA Toxic Substance Control Act

#### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

#### **SECTION 16: Other information**

#### Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
15.1	VOC content: 0 % 0 <sup>g</sup> / <sub>l</sub>	VOC content: 0 %	yes
15.1		VOC content: 0 <sup>g</sup> / <sub>l</sub>	yes
15.1		National inventories: change in the listing (table)	yes

United Kingdom (en) Page 15 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)

# ROTH

# Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: **7452** 

#### **Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations	
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)	
ATE	Acute Toxicity Estimate	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)	
Ceiling-C	Ceiling value	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
DNEL	Derived No-Effect Level	
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval	
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)	
ED	Endocrine disruptor	
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)	
EINECS	European Inventory of Existing Commercial Chemical Substances	
ELINCS	European List of Notified Chemical Substances	
EmS	Emergency Schedule	
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control	
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air	
IMDG	International Maritime Dangerous Goods Code	
IMDG-Code	International Maritime Dangerous Goods Code	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)	
	Short-term exposure limit	

United Kingdom (en) Page 16 / 17

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### Tetradecyltrimethylammonium bromide ≥96 %, extra pure

article number: 7452

Abbr.	Descriptions of used abbreviations
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

#### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H373	May cause damage to organs (gastro-intestinal tract) through prolonged or repeated exposure (if swallowed).
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

#### **Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

United Kingdom (en) Page 17 / 17