



## DODECYL TRIMETHYL AMMONIUM BROMIDE CAS No 1119-94-4

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : Dodecyl Trimethyl Ammonium Bromide

CAS-No. : 1119-94-4

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd

7/28 Vardaan House New Delhi -110002

**INDIA** 

Telephone : +91 11 49404040

Email : <a href="mailto:care@cdhfinechemical.com">care@cdhfinechemical.com</a>

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

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

#### 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust.

P273 Avoid release to the environment.

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

contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard

Statements

none

#### 2.3 Other hazards - none

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

#### 3.1 Substances

Formula : C<sub>15</sub>H<sub>34</sub>BrN

Molecular weight : 308.34 g/mol

CAS-No. : 1119-94-4

EC-No. : 214-290-3

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

## Dodecyltrimethylammoni ım bromide

CAS-No. 1119-94-4 Acute Tox. 4; Skin Irrit. 2; Eye <= 100 %

EC-No. 214-290-3 Irrit. 2; STOT SE 3; Aquatic

Acute 1; Aquatic Chronic 1; H302, H315, H319, H335,

H400, H410

M-Factor - Aquatic Acute: 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

## 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, Nitrogen oxides (NOx), Hydrogen bromide gas

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

#### **SECTION 6: Accidental release measures**

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

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

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic. Store under inert gas.

Storage class (TRGS 510): Combustible Solids

#### 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

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

## 9.1

ON 3. Filysical and chemical properties				
Information on basic physical and chemical properties				
a)	Appearance	Form: crystalline Colour: white		
b)	Odour	No data available		
c)	Odour Threshold	No data available		
d)	рН	No data available		
e)	Melting point/freezing point	Melting point/range: 246 °C		
f)	Initial boiling point and boiling range	No data available		
g)	Flash point	No data available		
h)	Evaporation rate	No data available		
i)	Flammability (solid, gas)	No data available		
j)	Upper/lower	No data available		
	flammability or			
	explosive limits			
L۱	Vanour proceuro	No data available		

Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n- octanol/water	No data available
	Vapour density Relative density Water solubility Partition coefficient: n-

<ul><li>p) Auto-ignition</li></ul>		No data available	
	temperature		

q)	Decomposition	No data available
	temperature	

No data available r) Viscosity Explosive properties No data available Oxidizing properties No data available

#### 9.2 Other safety information

No data available

#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

#### 10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx),

Hydrogen bromide gas

Other decomposition products - No data available

In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - 200 - 1,000.0 mg/kg(Dodecyltrimethylammonium bromide)

LD50 Intravenous - Rat - 6.8 mg/kg(Dodecyltrimethylammonium bromide)

Remarks: Lungs, Thorax, or Respiration:Other changes.

#### Skin corrosion/irritation

Irritating to skin.(Dodecyltrimethylammonium bromide)

#### Serious eye damage/eye irritation

Irritating to eyes.(Dodecyltrimethylammonium bromide)

#### Respiratory or skin sensitisation

No data available(Dodecyltrimethylammonium bromide)

#### Germ cell mutagenicity

No data available(Dodecyltrimethylammonium bromide)

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available(Dodecyltrimethylammonium bromide)

## Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. (Dodecyltrimethylammonium bromide)

## Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available(Dodecyltrimethylammonium bromide)

#### **Additional Information**

RTECS: BQ3195000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Dodecyltrimethylammonium bromide)

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish LC50 - Carassius auratus (goldfish) - 0.35 mg/l - 24

h(Dodecyltrimethylammonium bromide)

Toxicity to daphnia and

LC50 - Daphnia (water flea) - 0.065 mg/l - 24 h(Dodecyltrimethylammonium bromide)

other aquatic invertebrates

bromide

#### 12.2 Persistence and degradability

Biodegradability Result: - According to the results of tests of biodegradability this product is not

readily biodegradable.

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available(Dodecyltrimethylammonium bromide)

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

No data available

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

#### **Contaminated packaging**

Dispose of as unused product.

#### **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 3077 IMDG: 3077 IATA: 3077

## 14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Dodecyltrimethylammonium bromide)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Dodecyltrimethylammonium bromide)

IATA: Environmentally hazardous substance, solid, n.o.s. (Dodecyltrimethylammonium bromide)

#### 14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: no IATA: yes

## 14.6 Special precautions for user

#### **Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## **SECTION 15: Regulatory information**

## **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

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

#### Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.