



Safety Data Sheet

According to Regulation (EC) no. 1907/2006

Product Name
TETRA-N-OCTYLAMMONIUM BROMIDE

1.0 Chemical product and company identification

1.1 Product Identifier

MSDS Name: TETRA-N-OCTYLAMMONIUM BROMIDE
Substance name: TETRA-N-OCTYLAMMONIUM BROMIDE
CAS No: 14866-33-2
PRODUCT CODE:

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

Use of the Substance / Mixture: LABORATORY CHEMICALS

Recommended restrictions on use: At this time we do not yet have information of identified uses. They will be included in the safety data sheets when available

1.3 Details of the supplier of the safety data sheet

Company Identification:
SOLUMETRICS LTD,
UNIT 1B SILEBY ROAD INDUSTRIAL ESTATE. BARROW ON SOAR, LEIC'S. LE12 8LP.
For information call. +44 (0)1509 815348
For emergencies call. +44 (0)1509 815348

2.0 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) no 1272/2008

| | |
|---|-------------|
| SKIN CORROSION/ IRRITATION | CATEGORY 2 |
| SERIOUS EYE DAMAGE/ EYE IRRITATION | CATEGORY 2A |
| SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE) | CATEGORY 3 |

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbols: Xi - Irritant
R - Phrases: None
Risk Combination Phrases: R36/37/38 - Irritating to eyes, respiratory system and skin

HAZARDS SYMBOLS



Signal Word: Warning

Hazard Statements: At this time we do not yet have information of identified uses. They will be included in the safety data sheets when available

Hazard Statements:
H335 MAY CAUSE RESPIRATORY IRRITATION
H315 CAUSES SKIN IRRITATION
H319 CAUSES SERIOUSE EYE IRRATATION

Precautionary statements EU (28,1272/2008)

P305 + P351 + P338 If in EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do continue rinsing
P302 + P352 If on SKIN: Wash with plenty of soap and water
P261 Avoid breathing dust/fumes/gas/mist/vapors/spray
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection

Precautionary statements

| | |
|--|--|
| Prevention | At this time we do not yet have information of identified uses. They will be included in the safety data sheets when available |
| Response | At this time we do not yet have information of identified uses. They will be included in the safety data sheets when available |
| Hazardous components which must be listed on the label: | At this time we do not yet have information of identified uses. They will be included in the safety data sheets when available |

3.0 Composition/ Information on ingredients

3.1 Substances

| EC No | Component | GHSCLAS | Classification |
|----------------------|----------------------------|---|------------------|
| EEC No. 238-936-9 | Tetraoctylammonium Bromide | STOT SE3 (H335) Skin Irrit. 2 (H315) Eye Irrit.2 (H319) | Xi; R36/37/38 |

| Weight % | CAS No |
|----------|------------|
| 98 | 14866-33-2 |

Chemical Nature: CAS 14866-33-2

4.0 First Aid measures

4.1 Description of first aid measures

General Advice

| | |
|---------------------------------|--|
| If Inhaled: | Remove person to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give oxygen. Get medical attention. |
| In Case of Skin contact: | Get medical attention as soon as possible. Flush the skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash clothing before reuse. |
| In case of eye contact: | Immediately flush with copious amounts of water for at least 15 minutes occasionally lifting the upper and lower eyelids. Get medical attention as soon as possible. |
| If Swallowed: | If swallowed DO NOT induce vomiting unless directed by to do so by medical personnel. DO NOT give anything by mouth to an unconscious person. Get medical assistance. |

5.0 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Un-Suitable extinguishing Media: No information Available

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting: Thermal decomposition can lead to release of irritating gases and vapors

5.3 Advice for fire-fighters

Special protective equipment for fire-fighters: Wear a self-contained breathing apparatus in pressure demand, MSHA/NIOSH (approved or equivalent) full protective clothing and equipment.

Further Information: Wear a self-contained breathing apparatus in pressure demand, MSHA/NIOSH (approved or equivalent), and full protective equipment. During a fire irritating and highly toxic gasses may be generated by thermal decomposition or combustion. Dust from this product can form explosive organic dust cloud.

6.0 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation Use personal protective equipment Avoid dust formation

6.2 Environmental precautions:

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases

6.3 Methods and materials for containment and cleaning up:

Sweep or vacuum up material and place in a suitable container for disposal. Clean up spills immediately observing the precautions in the Protective equipment section. Provide adequate ventilation and avoid generating dusty conditions.

Further Information:

Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

7.0 Handling and storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimise dust generation and accumulation. Avoid contact with eyes, skin and clothing. Keep container(s) tightly closed. Avoid ingestion and inhalation.

7.1 Precautions for safe handling**Advice on safe handling:**

Wear personal Protective equipment ensure adequate ventilation do not get in eyes, on skin, or on clothing Avoid ingestion and inhalation avoid dust formation

Hygiene measures:

Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. Use adequate ventilation to keep airborne concentrations low.

7.2 Conditions for safe storage, including any incompatibilities**Requirements for storage area containers:**

Store in tightly closed containers in cool dry well ventilated area away from incompatible substances

Advice on Protection Against fire and explosion:

The product is not flammable. Normal measures for preventive fire protection.

Further information on storage conditions:

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

Advice on common storage:

Keep away from food, drink and animal feeding stuffs.

8.0 Exposure controls/ personal protection**8.1 Control parameters**

This product, as supplied does not contain and hazardous material with occupational exposure limits established by the region specific regulatory bodies.

Regulatory Basis
Regulatory List
Value Type
Value

UK. EH40 Workplace Exposure Limits (WELs)
 EH40 WEL

8.2 Exposure controls**Engineering measures**

Ensure that eyewash stations and safety showers are close to the workstation location ensure adequate ventilation, especially in confined areas.

Refer to protective measures listed in sections 7 and 8**Personal protective equipment****Respiratory protection****Advice:**

Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standards EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hand Protection**Advice:**

Wear suitable protective clothing, gloves check for compatibility with the manufacturers' guidelines to prevent skin exposure
Wear appropriate protective clothing to prevent skin exposure.

Eye Protection**Advice:**

Tightly fitting safety goggles
Wear appropriate protective eyeglasses or chemical safety goggles or full face protection. (European standard EN166).

Skin and Body Protection**Advice:**

The selection of personal protective equipment and procedures for use should be based on the work place risk assessment and local legislation. Respiratory protective equipment and gloves etc should be changed at regular intervals as specified in the work place risk assessment and in accordance with the manufacturer's information.

Environmental exposure controls**General advice**

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities for such cases

9.0 Physical and chemical properties**9.1 Information on basic physical and chemical properties**

| | |
|-----------------------------|---------------------|
| Form | POWDER, SOLID |
| Colour | Light Cream |
| Odour | No Odour |
| Odour Threshold | |
| PH | No Data Available |
| Melting Point | 95-99C - 203-210.2F |
| Boiling Point | No Data Available |
| Flash Point | No Data Available |
| Density | No Data Available |
| Molecular Formula | C32 H68 Br N |
| Molecular Weight | 546.81 |
| Water solubility | Freely Soluble |
| Ignition Temperature | No Data Available |
| Oxidizing Properties | No Data Available |

10.0 Stability and reactivity

| | |
|--|---|
| 10.1 Reactivity | No Data Available |
| 10.2 Chemical stability | This Product is Stable under normal conditions (temperature and pressure) |
| 10.3 Possibility of hazardous reactions | |
| Hazardous reaction: | No Data Available |
| 10.4 Conditions to avoid | Contact with incompatible materials, Dust generation, Excessive heat. |
| 10.5 Incompatible materials | |
| Materials to avoid: | Materials to avoid Strong Oxidising agents |
| 10.6 Hazardous decomposition products | Carbon Monoxide Carbon Dioxide Nitrogen Oxides Hydrogen Halides |

11.0 Toxicological Information**11.1 Information on toxicological effects****Inhalation****Remarks**

Inhalation may cause pain in respiratory system, sneezing coughing and difficulty in breathing.

Irritation

In case of contact with skin, rinse immediately with plenty of water.

Skin

| | |
|----------------------------|--|
| Eyes | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice |
| Sensitisation | No Information available |
| Further Information | Not listed as a carcinogen by ACGIH, IARC, NTP or CA prop 65 |

12.0 Ecological Information

12.1 Toxicity

| | |
|-----------------------------------|--|
| <u>Acute toxicity</u> | |
| <u>Fish</u> | |
| Species | No Ecological data available for this material. They will be included in the safety data sheets when available |
| Exposure Time | |
| Value Type Value | |
| Species | No Ecological data available for this material. They will be included in the safety data sheets when available |
| Exposure Time | |
| Value Type Value | |

Toxicity to daphnia and other aquatic invertebrates

| | |
|-----------------------------------|--|
| Species | No Ecological data available for this material. They will be included in the safety data sheets when available |
| Exposure Time | |
| Value Type Value | |

Bacteria

| | |
|-----------------------------------|--|
| Species | No Ecological data available for this material. They will be included in the safety data sheets when available |
| Exposure Time | |
| Value Type Value | |

12.2 Persistence and degradability

| | |
|--------------------------------------|--|
| <u>Persistence and degradability</u> | |
| <u>Biodegradability</u> | |
| Remarks | No Ecological data available for this material. They will be included in the safety data sheets when available |

12.3 Bioaccumulative potential

| | |
|------------------------|--|
| <u>Bioaccumulation</u> | |
| Remarks | No Ecological data available for this material. They will be included in the safety data sheets when available |

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

| | |
|--|--|
| <u>Additional ecological information</u> | |
| Remarks | |

13.0 Disposal considerations

13.1 Waste treatment methods

| | |
|--|--|
| Product | Disposal together with normal waste is not allowed. Special disposal required to local regulations. Do not let product enter drains. Contact waste disposal services. |
| Contaminated Packaging | Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product. |
| European Waste Catalogue Number | No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer. |

14.0 Transport information

| | |
|---|---------------|
| 14.1 UN number | Not Regulated |
| 14.2 UN proper shipping name | |
| ADR | Not Regulated |
| RID | Not Regulated |
| IMDG | Not Regulated |
| 14.3 Transport hazard class(es) | |
| ADR-Class (labels; Classification Code; Hazard Identification No; Tunnel restriction code) | Not Regulated |
| RID-Class (labels; Classification Code; Hazard Identification No; Tunnel restriction code) | Not Regulated |
| IMDG-Class (Labels; EmS) | Not Regulated |
| 14.4 Packing group | |
| ADR | Not Regulated |
| RID | Not Regulated |
| IMDG | Not Regulated |
| 14.5 Environmental Hazards | |
| Labelling according to 5.2.1.8 ADR | Not Regulated |
| Labelling according to 5.2.1.8 RID | Not Regulated |
| Labelling according to 5.2.6.3 IMDG | Not Regulated |
| Classification as environmentally hazardous | Not Regulated |
| According to 2.9.3 IMDG | Not Regulated |
| Classified as 'P' according to 2.10 IMDG | Not Regulated |
| 14.6 Special precautions for user | |
| 14.7 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | |
| IMDG | Not Regulated |

15.0 Regulatory Information

| | Component |
|--------|-----------|
| EINECS | 238-936-9 |
| ELINCS | - |
| NLP | - |
| TSCA | - |
| DSL | - |
| NDSL | - |
| PICCS | X |
| ENCS | - |
| CHINA | - |
| AICS | X |
| KECL | - |

Ledgend

| | |
|---------------|---|
| TSCA | United States Toxic Substance Control Act Section 8 (b) Inventory |
| EINECS/ELINCS | European Inventory Lists |
| DSL/NDSL | Canadian Domestic Substances List/Non-Domestic Substances List |
| ENCS | Japan Existing and New Chemical Substances |
| CHINA | China Inventory of existing Chemical Substances |
| AIC | Inventory of Chemical Substances |
| KECL | Existing and Evaluated Chemical Substances |
| PICCS | Philippines Inventory of Chemicals and Chemical Substances |

16.0 Other information

Full text of R-Phrases referred to under section 2 and 3

| | |
|-----|-----------------------------------|
| R36 | Irritating to eyes. |
| R37 | Irritating to respiratory system. |
| R38 | Irritating to skin. |

Full text of H-Statements referred to under section 2 and 3

| | |
|------|----------------------------------|
| H335 | MAY CAUSE RESPIRATORY IRRITATION |
| H315 | CAUSES SKIN IRRITATION |
| H319 | CAUSES SERIOUSE EYE IRRATATION |

Stafety Phrases

| | |
|-----|--|
| S26 | In case of contact with eyes, Rinse immediatley with plenty of water and seek medical help |
| S37 | Wear suitable gloves. |
| S39 | Wear eye / face protection. |

| | |
|----------------|--------------------------------|
| Remarks | WGK (WATER DANGER/ PROTECTION) |
|----------------|--------------------------------|

Other information

This information is based upon Solumetrics Ltd Knowledge of this product at the time this Safety Data Sheet was prepared. It is given in good faith and no warranty is implied. The information is belived to be correct but does not purport to be all inclusive and shall be used only as a guide. The user must satisfy him/her self as to the purpose this product is put to and the possible change in classification should this product be mixed or formulated with other compounds