

1 Identification

- **Product identifier**
- **Trade name:** Cetyltrimethylammonium Bromide
- **Article number:** 195029
- **CAS Number:**
57-09-0
- **EC number:**
200-311-3
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
United States
www.mpbio.com
- **Information department:** Product safety department
- **Emergency telephone number:** CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Harmful

Harmful if swallowed.



Irritant

Irritating to eyes, respiratory system and skin.



Dangerous for the environment

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Information concerning particular hazards for human and environment:** Not applicable.

- **Label elements**

- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: *Cetyltrimethylammonium Bromide*

(Contd. of page 1)

· **Hazard pictograms**

GHS05 GHS07

· **Signal word** *Danger*· **Hazard-determining components of labeling:***cetrimonium bromide*· **Hazard statements***Harmful if swallowed.**Causes skin irritation.**Causes serious eye damage.**May cause respiratory irritation.*· **Precautionary statements***If medical advice is needed, have product container or label at hand.**Keep out of reach of children.**Read label before use.**Avoid breathing dust/fume/gas/mist/vapours/spray.**Wear protective gloves/protective clothing/eye protection/face protection.**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**Specific treatment (see on this label).**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Classification system:**· **NFPA ratings (scale 0 - 4)***Health = 2**Fire = 1**Reactivity = 0*· **HMIS-ratings (scale 0 - 4)***Health = 2**Fire = 1**Reactivity = 0*· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** *Not applicable.*· **vPvB:** *Not applicable.*

3 Composition/information on ingredients

· **Chemical characterization: Substances**· **CAS No. Description***57-09-0 cetrimonium bromide*· **Identification number(s)**· **EC number:** *200-311-3*

USA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: Cetyltrimethylammonium Bromide

(Contd. of page 2)

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Immediately call a doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** 15-30 °C
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

USA

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: *Cetyltrimethylammonium Bromide*

(Contd. of page 3)

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.
- **Breathing equipment:**
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
 - **Penetration time of glove material**
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**

Form:	Liquid
Color:	Not determined.
 - **Odor:** Characteristic
 - **Odour threshold:** Not determined.
- | | |
|-----------------------------------|-------|
| pH-value at 25 °C (77 °F): | 5.0-7 |
|-----------------------------------|-------|
- **Change in condition**
 - **Melting point/Melting range:** 237-243 °C (459-469 °F)

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: Cetyltrimethylammonium Bromide

(Contd. of page 4)

Boiling point/Boiling range:	Undetermined.
· Flash point:	244 °C (471 °F)
· Flammability (solid, gaseous):	Product is not flammable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density at 20 °C (68 °F):	0.5 g/cm ³ (4.173 lbs/gal)
· Bulk density at 20 °C (68 °F):	390 kg/m ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water at 20 °C (68 °F):	3 g/l
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Organic solvents:	0.0 %
Solids content:	100.0 %
· Molecular weight	364.5 g/mol
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

USA

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: *Cetyltrimethylammonium Bromide*

(Contd. of page 5)

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

57-09-0 cetrimonium bromide

Oral	LD50	410 mg/kg (rat)
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- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** Very toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 3 (Assessment by list): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014


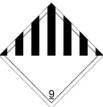
Reviewed on 08/27/2014

Trade name: Cetyltrimethylammonium Bromide

(Contd. of page 6)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT, ADR, IMDG, IATA 	<p style="margin-left: 20px;">UN3077</p>
<ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR · IMDG, IATA 	<p style="margin-left: 20px;">Environmentally hazardous substances, solid, n.o.s. 3077 Environmentally hazardous substances, solid, n.o.s. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.</p>
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADR, IATA <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> · Class · Label 	<p style="margin-left: 20px;">9 Miscellaneous dangerous substances and articles 9</p>
<ul style="list-style-type: none"> · IMDG <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> · Class · Label 	<p style="margin-left: 20px;">9 Miscellaneous dangerous substances and articles 9</p>
<ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA 	<p style="margin-left: 20px;">III</p>
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA): 	<p style="margin-left: 20px;">No Symbol (fish and tree) Symbol (fish and tree)</p>
<ul style="list-style-type: none"> · Special precautions for user · Danger code (Kemler): · EMS Number: 	<p style="margin-left: 20px;">Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F</p>
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	<p style="margin-left: 20px;">Not applicable.</p>
<ul style="list-style-type: none"> · Transport/Additional information: · DOT · Quantity limitations · Remarks: 	<p style="margin-left: 20px;">On passenger aircraft/rail: No limit On cargo aircraft only: No limit Special marking with the symbol (fish and tree).</p>

(Contd. on page 8)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: Cetyltrimethylammonium Bromide

(Contd. of page 7)

· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
<hr style="border-top: 1px dashed black;"/>	
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN3077, Environmentally hazardous substances, solid, n.o.s., 9, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· **Section 355 (extremely hazardous substances):**

Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

· **TSCA (Toxic Substances Control Act):**

Substance is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

· **Chemicals known to cause developmental toxicity:**

Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05

GHS07

(Contd. on page 9)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: Cetyltrimethylammonium Bromide

(Contd. of page 8)

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**
cetrimonium bromide
- **Hazard statements**
Harmful if swallowed.
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Specific treatment (see on this label).
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** *Product safety department*
- **Date of preparation / last revision** *08/27/2014 / -*
- **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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