

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Name:** Hexadecyltrimethylammonium Bromide

**Product Number:** All applicable American Elements product codes, e.g. AM-OMX-018-C

**CAS #:** 57-09-0

**Relevant identified uses of the substance:** Scientific research and development

**Supplier details:**

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351

**Emergency telephone number:**

+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

GHS label elements

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

Hazard pictograms



GHS07

Signal word Warning

Hazard-determining components of labeling:

cetrimonium bromide

Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

Health = 2

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH

FIRE

REACTIVITY

Health = 2

Fire = 0

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

CAS # / Substance Name

57-09-0 cetrimonium bromide

Identification number(s)

EC number: 20-0

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## SECTION 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.

If inhaled: In case of unconsciousness place patient stably in side position for transportation.

In case of skin contact: Immediately wash with soap and water; rinse thoroughly.

In case of eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

If swallowed: Immediately call a doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed:

No data available

Indication of any immediate medical attention and special treatment needed  
No data available

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## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing agents:

Sand. Do not use water.

CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water

Special hazards arising from the substance or mixture No data available

Advice for firefighters

Protective equipment: No special measures required.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions: No special measures required.

Methods and materials for containment and cleanup:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

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.

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## **SECTION 7. HANDLING AND STORAGE**

Handling:

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities:

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 data available

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## **SECTION 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

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Solid

Color: White

Odor: Odorless

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 248-251 °C (478-484 °F)

Boiling point/Boiling range: no data °C

Flash point: N/A

Flammability (solid, gas): Product is not flammable.

Ignition temperature:

Decomposition temperature: No data available.

Autoignition: No data available.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: No data available.

Upper: No data available.

Vapor pressure: no data hPa

Density at 20 °C (68 °F): 0.5 g/cm<sup>3</sup> (4.173 lbs/gal)

Bulk density at 20 °C (68 °F): 390 kg/m<sup>3</sup>

Relative density No data available.

Vapor density N/A

Evaporation rate N/A  
Solubility in / Miscibility with  
Water at 20 °C (68 °F): 3 g/l  
Partition coefficient (n-octanol/water): No data available.  
Viscosity:  
Dynamic: N/A  
Kinematic: N/A  
Solvent content:  
Organic solvents: 0.0 %  
VOC content: 0.0 g/l / 0.00 lb/gl  
Solids content: 100.0 %  
Other information No data available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity No data available  
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 data available  
Incompatible materials: No data available  
Hazardous decomposition products: No dangerous decomposition products known.

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## SECTION 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)  
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.

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## SECTION 12. ECOLOGICAL INFORMATION

Toxicity  
Aquatic toxicity: No data available  
Persistence and degradability No data available  
Behavior in environmental systems:

Bioaccumulative potential No data available  
Mobility in soil No data available  
Additional ecological information: Not known to be hazardous to water.  
Results of PBT and vPvB assessment  
PBT: N/A  
vPvB: N/A  
Other adverse effects No data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods  
Recommendation:  
Must not be disposed of together with household garbage. Do not allow product to enter drains, sewage systems, or other water courses system.  
Uncleaned packagings:  
Recommendation: Disposal must be made according to official regulations.

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## **SECTION 14. TRANSPORT INFORMATION**

UN-Number  
DOT, IMDG, IATA UN3077  
UN proper shipping name  
DOT Environmentally hazardous substances, solid, n.o.s.  
IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
IATA Environmentally hazardous substance, solid, n.o.s.  
Transport hazard class(es)  
DOT, IMDG, IATA  
Class 9 Miscellaneous dangerous substances and articles  
Label 9  
Packing group  
DOT, IMDG, IATA III  
Environmental hazards:  
Marine pollutant: No  
Special precautions for user Warning: Miscellaneous dangerous substances and articles  
EMS Number: F-A,S-F  
Stowage Category A  
Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.  
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N/A  
Transport/Additional information:  
DOT  
Quantity limitations On passenger aircraft/rail: No limit  
On cargo aircraft only: No limit  
UN "Model Regulation": UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S., 9, III

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## **SECTION 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

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Hazard pictograms

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Signal word Warning

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Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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## SECTION 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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

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