



MATERIAL SAFETY DATA SHEET

NAME OF PRODUCT: ($^{13}\text{CH}_3$)₂-Dimethylsulfoniopropionate chloride, ($^{13}\text{CH}_3$)₂-DMSP-Cl

MSDS DATE: January 2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ($^{13}\text{CH}_3$)₂-Dimethylsulfoniopropionate chloride, ($^{13}\text{CH}_3$)₂-DMSP-Cl

Synonyms:

3-($^{13}\text{CH}_3$)₂-Dimethylsulfoniopropionate
beta-($^{13}\text{CH}_3$)₂-Dimethylsulfoniopropionate
beta-($^{13}\text{CH}_3$)₂-DMSP
S-($^{13}\text{CH}_3$)₂-Dimethylsulfonium propionic acid
($^{13}\text{CH}_3$)₂-DMPT
($^{13}\text{CH}_3$)₂-Dimethyl-beta-propiothetin
($^{13}\text{CH}_3$)₂-Dimethylpropiothetin
S,S-($^{13}\text{CH}_3$)₂-Dimethyl-beta-propiothetin
Sulfonium, (2-carboxyethyl) ($^{13}\text{CH}_3$)₂-dimethyl-, hydroxide, inner salt
3-(($^{13}\text{CH}_3$)₂-Dimethylsulfonio)propanoate
(($^{13}\text{CH}_3$)₂-Dimethylsulfaniumyl)propanoate

Purity: > 98%

CAS Number: -

Chemical Formula: $^{12}\text{C}_3\text{ }^{13}\text{C}_2\text{H}_{11}\text{ClO}_2\text{S}$

Molecular Weight: 172,66 g/mol

MANUFACTURER and EMERGENCY CONTACT : MARNAS Biochemicals GmbH ;

ADDRESS: Nienburger Str.10, 27572 Bremerhaven, Germany

Tel: +49 152 0879 0528

www.marnas.de

Mail: info@marnas.de

CHEMICAL NAME: ($^{13}\text{CH}_3$)₂-Dimethylsulfoniopropionat

CHEMICAL FAMILY: Organosulfur compound found in phytoplankton and seaweeds

CHEMICAL FORMULA: $^{12}\text{C}_3\text{ }^{13}\text{C}_2\text{H}_{11}\text{ClO}_2\text{S}$

PRODUCT USE: ecological investigations

SECTION 2: HAZARDS IDENTIFICATION

ACUTE HEALTH HAZARDS: To the best of our knowledge, the toxicological properties of this compound have not been fully investigated. It may cause toxic effects if ingested, inhaled or absorbed through skin. Exercise appropriate precautions to prevent inhalation and direct contact with skin or eyes.

INDICATION OF DANGER: Xi-irritant

R-phrases R36/37/38- irritating to eyes, respiratory system and skin

Inhalation:

Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Can produce delayed pulmonary edema.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance has not been fully investigated

CHRONIC HEALTH HAZARDS: unknown

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: unknown

CARCINOGENICITY: unknown



MATERIAL SAFETY DATA SHEET

NAME OF PRODUCT: ($^{13}\text{CH}_3$)₂-Dimethylsulfoniopropionate chloride, ($^{13}\text{CH}_3$)₂-DMSP-Cl

MSDS DATE: January 2015

SECTION 3: FIRST AID MEASURES

EYES: Flush eyes with running water for at least 15 minutes holding the eyelids open. Seek medical attention immediately

SKIN: Wash with soap and water for 15 minutes. Remove contaminated clothing and shoes. Seek medical attention immediately

INGESTION: Rinse mouth with water. Seek medical attention immediately.

INHALATION: Remove from exposure and move the exposed person to fresh air. If breathing is difficult, administer oxygen.

SECTION 4: FIRE-FIGHTING MEASURES

FLAMMABILITY: not available

FLASH POINT: not available

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

NOTES: Use self contained breathing apparatus and protective clothing to prevent contact with skin and eyes

SECTION 5: ACCIDENTAL RELEASE MEASURES

GENERAL INFORMATION:

Use proper personal protective equipment, protective clothing, chemical resistant rubber gloves, rubber boots and chemical safety goggles.

SPILLS/LEAKS:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

SECTION 6: HANDLING AND STORAGE

HANDLING:

Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Use with adequate ventilation. Wash clothing before reuse. Avoid breathing dust.

STORAGE:

Store in a cool dry place. Store in a tightly closed container.

SECTION 7: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:

Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Safety glasses. A face-shield, if the situation requires.

Skin and body protection: Protective clothing. Protective boots, if the situation requires



MATERIAL SAFETY DATA SHEET

NAME OF PRODUCT: ($^{13}\text{CH}_3$)₂-Dimethylsulfoniopropionate chloride, ($^{13}\text{CH}_3$)₂-DMSP-Cl

MSDS DATE: January 2015

SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: white salt
ODOR: characteristic

PHYSICAL STATE: solid
pH: as supplied
BOILING POINT: not available
MELTING POINT: 120 to 125 °C
FREEZING POINT: not available
FLASH POINT: not available
FLAMMABILITY OR EXPLOSIVE LIMITS
Lower: No data available
Upper: No data available

SECTION 9: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions
POSSIBILITIES OF HAZARDOUS REACTIONS: no special reactivity has been reported
INCOMPATIBLE MATERIALS: Oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Sulfur oxides, Hydrogen chloride

SECTION 10: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: no data available

SECTION 11: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: no data available

SECTION 12: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: dispose in compliance with the local and national regulations

SECTION 13: TRANSPORT INFORMATION

The product is not classified as dangerous for carriage

SECTION 14: REGULATORY INFORMATION

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Indication of danger Xi-Irritant
In accordance with local and national regulations
R-phrases(s)
R36/37/38-Irritating to eyes, respiratory system and skin.
S-phrase(s)
S-26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36-Wear suitable protective clothing.



MATERIAL SAFETY DATA SHEET

NAME OF PRODUCT: ($^{13}\text{CH}_3$)₂-Dimethylsulfoniopropionate chloride, ($^{13}\text{CH}_3$)₂-DMSP-Cl

MSDS DATE: January 2015

SECTION 15: OTHER INFORMATION

DISCLAIMER: The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.