

DL-METHIONINE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: DL-METHIONINE

Product Code: 1124

CAS#: 59-51-8

Chemical Formula: C₅H₁₁NO₂S

Molecular Formula: 149.21/mol

Formula Weight: NA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Synonyms:

Formula: C₅H₁₁NO₂S

Molecular Weight: 149.21g/mol

CAS-No.: 59-51-8

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 not a hazardous substance or mixture according to Regulation (EC) No 1272/2008

Other hazards: none

SECTION 4: FIRST AID MEASURES

Description of first aid measures

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

Eye Contact: Flush eyes with water as a precaution.

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

Serious Skin Contact: Not available

Serious Inhalation: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician

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

Serious Ingestion: Not available

Most important symptoms and effects, both acute and delay No data available

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

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media

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

Special hazards arising from the substance or mixture no data available

Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapor's, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

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.

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.



SECTION 7: HANDLING AND STORAGE

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.

Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s) A part from the uses no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Personal protective equipment

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of workday.

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance Form	: White crystalline Powder, Sweet and slightly bitter taste.
Odour	: Not available
Taste	: Not available
Molecular Weight	: Not available
Colour	: Not available
pH	: Not available
Boiling Point	: Not available
Melting Point	: Not available
Critical Temperature	: Not available
Specific Density	: Not Available
Vapor Pressure	: Not Available
Vapor Density	: Not available
Volatility	: Not Available
Odor Threshold	: Not Available
Water/Oil Dist. Coeff.	: Not Available
Ionicity (in Water)	: Not Available
Dispersion Properties	: Not Available
Solubility	: Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity no data available

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions no data available

Conditions to avoid no data available

Incompatible materials Strong oxidizing agents

Hazardous decomposition products no data available



Other decomposition products - no data available

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

LD50 Oral - Rat - male and female - > 10.000 mg/kg (OECD Test Guideline 401) Remarks: The value is given in analogy to the following substances: L-methionine Inhalation: No data available Dermal: No data available

Skin corrosion/irritation:

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404) Remarks: The value is given in analogy to the following substances: L-methionine

Serious eye damage/eye irritation:

Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405) Remarks: The value is given in analogy to the following substances: L-methionine

Respiratory or skin sensitization:

Buehler Test - Guinea pig

Result: negative (OECD Test Guideline 406)

Remarks: The value is given in analogy to the following substances: L-methionine

Germ cell mutagenicity:

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative Remarks: (ECHA) The value is given in analogy to the following substances: L-methionine

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Remarks: The value is given in analogy to the following substances: L-methionine

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity: no data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity no data available

Persistence and degradability no data available

Bio-accumulative potential no data available

Mobility in soil no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not data available

Other adverse effects no data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID:

IMDG:

IATA:

UN proper shipping name



ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es):

ADR/RID:

IMDG:

IATA:

Packaging group:

ADR/RID:

IMDG:

IATA:

Environmental hazards:

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

SECTION 15: OTHER REGULATORY INFORMATION

Regulatory information This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements

LD50 Oral - Rat - male and female - > 10.000 mg/kg

Other Special Considerations: Not available.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.