

# Material Safety Data Sheet

## L-Methionine

ACC# 00822

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** L-Methionine

**Catalog Numbers:** AC166160000, AC166160250, AC166161000, BP388-100

**Synonyms:** L-2-Amino-4-(methylthio)butyric acid; Met; (S)-2-Amino-4-(methylthio)butanoic acid, an essential amino acid for human development.

**Company Identification:**

Fisher Scientific

1 Reagent Lane

Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
63-68-3	L-Methionine	>98	200-562-9

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white solid.

**Caution!** May cause eye, skin, and respiratory tract irritation.

**Target Organs:** No data found.

#### Potential Health Effects

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Ingestion:** May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

**Chronic:** Not available.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dust from this material can form explosive organic dust cloud.

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

**Flash Point:** 284 deg C ( 543.20 deg F)

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 1; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid breathing dust.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Refrigeration has been recommended.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Good general ventilation should be sufficient to control airborne levels.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
L-Methionine	none listed	none listed	none listed

**OSHA Vacated PELs:** L-Methionine: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

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

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid  
**Appearance:** white  
**Odor:** faint odor  
**pH:** 5.6-6.1 (1% aq soln)  
**Vapor Pressure:** Not available.  
**Vapor Density:** Not available.  
**Evaporation Rate:** Not available.  
**Viscosity:** Not available.  
**Boiling Point:** Not available.  
**Freezing/Melting Point:** 276 - 279 deg C  
**Decomposition Temperature:** 276 deg C  
**Solubility:** 56.6 g/L @ 25癢  
**Specific Gravity/Density:** Not available.  
**Molecular Formula:** C5H11NO2S  
**Molecular Weight:** 149.21

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Dust generation, excess heat, prolonged exposure to air.  
**Incompatibilities with Other Materials:** Strong oxidizing agents.  
**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, oxides of sulfur, carbon dioxide.  
**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**  
**CAS#** 63-68-3: PD0457000  
**LD50/LC50:**  
**CAS#** 63-68-3:  
Oral, rat: LD50 = 36 gm/kg;

**Carcinogenicity:**  
**CAS#** 63-68-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.  
**Teratogenicity:** Embryo or Fetus: Fetotoxicity. Specific Developmental Abnormalities: Musculoskeletal.  
**Reproductive Effects:** Experimental reproductive effects have been observed.  
**Mutagenicity:** No data available.  
**Neurotoxicity:** No data available.  
**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not Regulated	Not Regulated
Hazard Class:		
UN Number:		
Packing Group:		

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 63-68-3 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 63-68-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

Not available.

#### Risk Phrases:

**Safety Phrases:**

S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)**

CAS# 63-68-3: 0

**Canada - DSL/NDSL**

CAS# 63-68-3 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of Not controlled..

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

<b>Section 16 - Additional Information</b>
--

**MSDS Creation Date:** 9/02/1997

**Revision #6 Date:** 6/29/2007

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*