

## GPS Safety Summary MHA<sup>®</sup>

### General Statement

This Product Safety Summary is intended to provide a general overview of the chemical substance. It constitutes basic information and is not intended to provide emergency response information, medical information, treatment information or in-depth safety and health information, which can only be found in the applicable Safety Data Sheet (SDS).

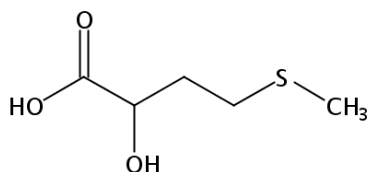
### Chemical Identity

**Chemical Name:** Calcium bis (Methionine hydroxy analogue)

**CAS:** 4857-44-7

**Molecular Formula:** C<sub>5</sub> H<sub>10</sub> O<sub>3</sub> S · 1/2 Ca

**Structure:**



• 1/2 Ca

### Uses and Benefits

MHA<sup>®</sup> feed supplement is a source of methionine activity that is used to support growth and performance of poultry, livestock and fish. MHA<sup>®</sup> is the dry granular formulation of ALIMET<sup>®</sup> feed supplement. In addition to meeting animal methionine requirements, MHA<sup>®</sup> also provides antibacterial and antioxidant effects in the feed, maintains performance during heat stress, and provides an organic source of calcium.

### Physical / Chemical Properties

MHA<sup>®</sup> is a light tan to tan granular powder with a sulfurous odor and a pH of 11 at 5% solution. MHA<sup>®</sup> has a solubility of 74 g/kg at 25° and the material density is 800-850 kg/m<sup>3</sup> (loose). MHA<sup>®</sup> is not oxidative and has dust explosion class ST1 (weak explosion). The shelf life is a minimum of 5 years when stored as directed.

### Health Effects

The acute toxicity does not pose a significant hazard given its purpose as an animal feed ingredient. Consult your feeding advisor for recommended doses.

Information on likely routes of exposure includes:

- Inhalation: Dust may irritate respiratory system.
- Skin contact: Dust or powder may irritate the skin.
- Eye contact: Causes serious eye irritation.
- Ingestion: May cause discomfort if swallowed. Expected to be a low ingestion hazard.

### Environmental Effects

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. The product is water soluble and may spread in water systems.

### Exposure

All personnel are instructed to use dust-resistant eye protection and protective gloves when handling or working with equipment that has come in contact with MHA<sup>®</sup>.

### Consumer Exposure Controls

There is no exposure limit data available for MHA<sup>®</sup>. However, OSHA and ACGIH have established nuisance dust limits. See SDS for more information.

### Safe Handling

Avoid contact with eyes and skin. Provide adequate ventilation. Eliminate all sources of ignition. Observe good industrial hygiene practices and minimize dust production. Do not taste or swallow. When using, do not eat, drink, or smoke. Wash hands thoroughly after handling. Wear appropriate personal protective equipment.

### Safe Storage & Accidental Release Measures

Store

- in original tightly closed container
- in a dry, cool, well-ventilated area
- away from heat, sparks and flame

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Use explosion-proof electrical equipment if airborne dust levels are high. Sweep up or vacuum spills and collect in suitable container for disposal. Do not vacuum clean unless vacuum cleaners are equipped with

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HEPA filter. Spilled material should be properly disposed and never reused. For waste disposal, see the safety data sheet.

### State Agency Review

*US. Massachusetts RTK - Substance List*  
Calcium Hydroxide (CAS 1305-62-0)

*US. New Jersey Worker and Community Right-to-Know Act*  
Calcium Hydroxide (CAS 1305-62-0)

*US. Pennsylvania Worker and Community Right-to-Know Law*  
Calcium Hydroxide (CAS 1305-62-0)

*US. Rhode Island RTK*  
Not regulated.

*US. California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)*  
This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

### Classification and Labeling

#### Physical Hazards

Not classified.

#### Health Hazards

Serious eye damage/eye irritation – Category 2

#### Environmental Hazards

Not classified.

#### Label Elements



#### Signal Word

Warning

#### Hazard Statement

Causes serious eye irritation.

#### OSHA Defined Hazards

Not classified.

#### Hazard(s) not otherwise classified (HNOC)

None known.

### Conclusion

MHA<sup>®</sup> has been shown to be safe when care is taken during its use and instructions provided are followed. However, MHA<sup>®</sup> has a high pH, is a skin, eye, and respiratory irritant, and may cause harm to the environment at excessive concentrations.

### Company Contact Information

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