

## CREATINE (MONOHYDRATE)

### SECTION 1: PRODUCT IDENTIFICATION

**Product Name:** CREATINE (MONOHYDRATE)

**Product Code:** 1807

**CAS#:** 6020-87-7

**Synonym:** N-(Aminoiminomethyl)-N-methylglycine

**Chemical Name:** N-(Aminoiminomethyl)-N-methylglycine.

**Chemical Formula:** C<sub>4</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub>.H<sub>2</sub>O

**Formula Weight:** 149.16

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

**Composition:**

**Name:** CREATINE (MONOHYDRATE)

**Toxicological Data on Ingredients:** Not applicable

### SECTION 3: HAZARDS IDENTIFICATION

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** Not available.

**Mutagenic Effects:** Not available.

**Teratogenic Effects:** Not available.

**Developmental Toxicity:** Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

### SECTION 4: FIRST AID MEASURES

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. WARM water MUST be used. Get medical attention if irritation occurs.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

**Serious Skin Contact:** Not available.

**Serious Inhalation:** Not available.

**Ingestion:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Ingestion:** Not available.

### SECTION 5: FIRE FIGHTING MEASURES

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not available.

**Flammable Limits:** Not available.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Slightly flammable to flammable in presence of heat.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames and sparks.

**Fire Fighting Media and Instructions:**



SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** As with most organic solids, fire is possible at elevated temperatures

**Special Remarks on Explosion Hazards:**

Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Small Spill:** Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

**Large Spill:** Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources.

## SECTION 7: HANDLING AND STORAGE

**Precautions:** Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents.

**Storage:** Store in tightly closed container in a cool, & dry place.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure controls**

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance Form	: White Crystalline powder,
Taste	: odorless, Odour
Molecular Weight	: Not available
Colour	: Colorless
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

**Stability:** The product is stable.  
**Instability Temperature:** Not available.  
**Conditions of Instability:** Excess heat, dust generation  
**Incompatibility with various substances:** Reactive with oxidizing agents.  
**Corrosivity:** Non-corrosive in presence of glass.  
**Special Remarks on Reactivity:** Not available.  
**Special Remarks on Corrosivity:** Not available.  
**Polymerization:** Will not occur.

### SECTION 11: TOXICOLOGICAL INFORMATION

**Routes of Entry:** Eye contact, Inhalation, Ingestion.  
**Toxicity to Animals:**  
**LD<sub>50</sub>:** Not available  
**LC<sub>50</sub>:** Not available  
**Chronic Effects on Humans:** The substance is toxic to lungs, mucous membranes.  
**Other Toxic Effects on Humans:** Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of inhalation.  
Slightly hazardous in case of skin contact (permeator).  
**Special Remarks on Toxicity to Animals:** Adverse reproductive effects have occurred in experimental animals. Boric acid has selectively damaged the testes, sperm production and fertility in rats and dogs. **Special Remarks on Chronic Effects on Humans:** Not available.  
**Special Remarks on other Toxic Effects on Humans:** Not available.

### SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.  
**BOD5 and COD:** Not available.  
**Products of Biodegradation:**  
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.  
**Toxicity of the Products of Biodegradation:** Not available.  
**Special Remarks on the Products of Biodegradation:** Not 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

**Federal and State Regulations:** TSCA 8(b) inventory: Not listed. **Other Regulations:** Not available. **Other Classifications:**  
**WHMIS (Canada):** Not controlled under WHMIS (Canada).  
**DSCL (EEC):**  
This product is not classified according to the EU regulations. Not applicable.



**HMIS (U.S.A.):**

**Health Hazard:** Not dangerous goods

**Fire Hazard:** Not dangerous goods

**Reactivity:** Not dangerous goods

**Personal Protection:** Not dangerous goods

**National Fire Protection Association (U.S.A.):**

**Health:** Not dangerous goods

**Flammability:** Not dangerous goods

**Reactivity:** Not dangerous goods

**Specific hazard:**

**Protective Equipment:**

Gloves, Lab coat, Safety glasses, Dust respirator - be sure to use an approved/certified respirator or equivalent.

**SECTION 15: OTHER REGULATORY INFORMATION**

**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.

**.SECTION 16: OTHER INFORMATION**

**References: Full text of H AND R-Statements.**

Not available

**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.