

## Material Safety Data Sheet Creatine Monohydrate

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Creatine Monohydrate  
**Synonyms:** N-(Aminoiminomethyl)-N-methylglycine.  
**Chemical Family:** None Known  
**Application:** Laboratory and Research.

**Distributed By:**  
Ingredient Depot

**Prepared By:** Ingredient Depot Compliance & Regulatory Affairs Dept.  
**Preparation date of MSDS:** 25 October 2018  
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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### COMPOSITION

Ingredients	Percentage by weight	LD50s and LC50s Route & Species:
Creatine Monohydrate CAS#: 6020-87-7	100	Not available.

**Notes:** No additional remark.

### 3. HAZARDS IDENTIFICATION

#### Potential Acute Health Effects:

Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator).

#### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

## 4. FIRST AID MEASURES

**Eye Contact:** Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

**Skin Contact:** After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

**Serious Skin Contact:** Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation:** Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

**Ingestion:** Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

## 5. FIRE FIGHTING MEASURES

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

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Flammable Limits in Air (%):** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...).

**Fire Hazards in Presence of Various Substances:** Not available.

**Explosion Hazards in Presence of Various Substances:** Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

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

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures:** Avoid creating and breathing dust. Wear appropriate protective equipment.

**Environmental Precautionary Measures:** Prevent entry into sewers or streams, dike if needed. Consult local authorities.

**Procedure for Clean Up:** Sweep up and place in an appropriate closed container.

## 7. HANDLING AND STORAGE

**Handling:** No special handling required

**Storage:** Store in a cool, dry, well ventilated area, away from heat and ignition sources. Store in accordance with good industrial practices. Place away from incompatible materials.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Local exhaust ventilation as necessary to maintain exposures to within applicable limits.

**Respiratory Protection:** If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use NIOSH approved supplied air respirator.

**Gloves:** Appropriate chemical resistant gloves should be worn.

**Skin Protection:** Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

**Eyes:** Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Personal Protection Data:** Ensure that eyewash stations and safety showers are proximal to the work-station location.

Ingredients	Exposure Limit - ACGIH	Exposure Limit - OSHA	Immediately Dangerous to Life or Health - IDLH
Creatine Monohydrate	Not available.	Not available.	Not Available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Powder.

**Color:** White

**Odor:** Not available.

**pH:** Not available.

**Specific Gravity:** 1.3

**Boiling Point:** Decomposes. (303°C or 577.4°F)  
**Freezing/Melting Point:** Decomposes. (303°C or 577.4°F)  
**Vapor Pressure:** Not applicable.  
**Vapor Density:** Not Available.  
**% Volatile by Volume:** Not Available.  
**Evaporation Rate:** Not Available.  
**Solubility:** Partially soluble in cold water.  
**VOCs:** Not Available.  
**Viscosity:** Not Available.  
**Molecular Weight:** Not Available.

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable.  
**Hazardous Polymerization:** Will not occur.  
**Conditions to Avoid:** Not available.  
**Materials to Avoid:** Not available.  
**Hazardous Decomposition Products:** Not available.  
**Additional Information:** No additional remark.

## 11. TOXICOLOGICAL INFORMATION

**Routes of entry:** Eye contact. Inhalation. Ingestion.  
**Toxicity to Animals:** LD50: Not available. LC50: 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:** Not available.  
**Special Remarks on Chronic Effects on Humans:** Not available.  
**Special Remarks on other Toxic Effects on Humans:** Not available.

## 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:** The products of degradation are more toxic.  
**Special Remarks on the Products of Biodegradation:** Not available.

## 13. DISPOSAL CONSIDERATIONS

**Disposal of Waste Method:** Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.  
**Contaminated Packaging:** Empty containers should be recycled or disposed of through an approved waste management facility.

## 14. TRANSPORT INFORMATION

### DOT (U.S.):

**DOT Shipping Name:** Not Regulated.

**DOT Hazardous Class:** Not Applicable.

**DOT UN Number:** Not Applicable.

**DOT Packing Group:** Not Applicable.

**DOT Reportable Quantity (lbs):** Not Applicable.

**Notes:** No additional remark.

**Marine Pollutant:** No.

### ICAO/IATA:

**IATA Proper Shipping Name:** Not Regulated.

**IATA Hazard Class:** Not Applicable.

**UN Number:** Not Applicable.

**Packing Group:** Not Applicable.

**IATA Label:** Not Applicable.

**IATA Remarks:** No additional remark.

### IMDG:

**IMDG Proper Shipping Name:** Not Regulated.

**Hazard Class:** Not Applicable.

**UN Number:** Not Applicable.

**Packing Group:** Not Applicable.

**Marine Pollutant:** No.

**IMDG Label:** Not Applicable.

**Remarks:** No additional remark.

### TDG (Canada):

**TDG Proper Shipping Name:** Not Regulated.

**Hazard Class:** Not Applicable.

**UN Number:** Not Applicable.

**Packing Group:** Not Applicable.

**Note:** No additional remark.

**Marine Pollutant:** No.

## 15. REGULATORY INFORMATION

**U.S. TSCA Inventory Status:** All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

**Canadian DSL Inventory Status:** All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

### U.S. Regulatory Rules

Ingredients	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Creatine Monohydrate	Not Listed.	Not Listed.	Not Listed.

**California Proposition 65:** Not Listed.

**MA Right to Know List:** Not Listed.

**New Jersey Right-to-Know List:** Not Listed.

**Pennsylvania Right to Know List:** Not Listed.

**WHMIS Hazardous Class:** Not controlled.

## 16. OTHER INFORMATION

### **Additional Information:**

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

### **Disclaimer:**

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**\*\*\*END OF MSDS\*\*\***