


# SAFETY DATA SHEET

## CREATINE MONOHYDRATE

### SECTION 1: Identification of the substance/mixture and of the company/undertaking Trade name:

<b>1.1 Product identifier:</b>	
<b>CAS Number:</b>	6020-87-7
<b>EC number:</b>	227-236-7
<b>1.2 SYNONYMS:</b>	<ul style="list-style-type: none"> <li>• Creatine monohydrate</li> <li>• Creatine</li> <li>• Monohydrate creatine</li> <li>• 1-Methyl-guanido-2-propanoic acid, monohydrate</li> </ul>

### SECTION 2: Hazards identification:

<b>2.1 Classification of the substance or mixture:</b>	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
<b>2.2 Label elements:</b>	Labelling according to Regulation (EC) No 1272/2008 Skin irritation (Category 2) Eye irritation (Category 2) Specific target organ toxicity - single exposure (Category 3)
<b>Hazard Pictograms:</b>	
<b>Signal Word:</b>	Warning
<b>Hazard statements:</b>	<b>H315:</b> Causes skin irritation. <b>H319:</b> Causes serious eye irritation. <b>H335:</b> May cause respiratory irritation. <b>H373:</b> May cause damage to organs (specifically kidneys) through prolonged or repeated exposure if consumed in extremely high doses.
<b>Precautionary Statements:</b>	<b>P264:</b> Wash hands thoroughly after handling.

	<p><b>P270:</b> Do not eat, drink, or smoke when using this product.</p> <p><b>P280:</b> Wear protective gloves and eye protection if handling in bulk or in powdered form to avoid irritation from dust.</p> <p><b>P301+P312:</b> IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell (especially if consumed in excessive amounts).</p> <p><b>P330:</b> Rinse mouth if accidentally ingested in large quantities.</p> <p><b>P304+P340:</b> IF INHALED: Remove person to fresh air and keep comfortable for breathing (important in case of inhaling dust).</p> <p><b>P305+P351+P338:</b> IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.</p> <p><b>P501:</b> Dispose of contents/ container in accordance with local/regional/national/ international regulations (this would apply for large-scale disposal).</p>
<b>2.3 Other hazards:</b>	
<b>Inhalation:</b>	may cause respiratory irritation or discomfort, especially in high concentrations.
<b>Ingestion:</b>	may lead to gastrointestinal discomfort, dehydration, or strain on the kidneys, particularly in individuals with pre-existing kidney conditions.
<b>Skin Contact:</b>	generally not harmful, but prolonged exposure to the powder may cause mild irritation or dryness in some individuals.
<b>Eye contact:</b>	may cause mild irritation, redness, or discomfort.

<b>Chronic Exposure:</b>	may potentially lead to kidney strain or damage, particularly in individuals with pre-existing kidney conditions, though this is rare when used as recommended.
<b>Aggravation of pre-existing conditions:</b>	Aggravation of pre-existing conditions, such as kidney disease, may occur with the chronic use in high doses as it can put additional strain on the kidneys.

### SECTION 3: Composition/information on ingredients

<b>3.1 Chemical characterisation:</b>	Substances
<b>CAS No:</b>	Description: 6020-87-7 CREATINE MONOHYDRATE
<b>Identification number(s):</b>	EC number: 227-236-7

### SECTION 4: First aid measures

<b>4.1 Description of first aid measures</b>	
<b>General information:</b>	
<b>After inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>After skin contact:</b>	Remove contaminated clothing. Wash with soap and water. Consult a physician.
<b>After eye contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
<b>After swallowing:</b>	Rinse mouth with water. Immediately after ingestion. Never give anything by mouth to an unconscious person. Do not

	induce vomiting. Consult a physician.
<b>4.2 Most important symptoms and effects, both acute and delayed:</b>	The most important symptoms may include gastrointestinal discomfort and dehydration, while delayed effects can involve kidney strain or damage, particularly with prolonged excessive use in individuals with pre-existing kidney conditions.
<b>4.3 Indication of any immediate medical attention and special treatment needed:</b>	Treat symptomatically.

## SECTION 5: Firefighting measures

<b>5.1 Extinguishing media:</b>	Carbon dioxide. Water spray. Alcohol-resistant foam.
<b>5.2 Special hazards arising from the substance or mixture:</b>	No data available
<b>5.3 Advice for firefighters:</b>	Wear fully protective suit, safety glasses and respiratory device. Cool tanks/drums with water spray/remove them into safety.
<b>5.4 further information:</b>	no data available

## SECTION 6: Accidental release measures

<b>6.1 Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
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<b>6.2 Environmental precautions:</b>	Do not enter this chemical into drains.
<b>6.3 Methods and material for containment and cleaning up:</b>	Take up spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

## SECTION 7: Handling and storage

<b>7.1 Precautions for safe handling:</b>	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation.
<b>7.2 Conditions for safe storage, including any incompatibilities:</b>	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area.
<b>Requirements to be met by storerooms and receptacles:</b>	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
<b>7.3 Specific end uses:</b>	no data available

## SECTION 8: Exposure controls/personal protection

<b>8.1 Control parameters</b>	
<b>Additional information about design of technical facilities:</b>	A system of local and general exhaust is recommended.
<b>8.2 Exposure controls</b>	
<b>Appropriate engineering controls</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>Personal protective equipment:</b>	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
<b>General protective and hygienic measures:</b>	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	<b>Respiratory protection:</b> Required.
<b>Protection of hands:</b>	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. Wash and dry hands.
	<b>Eye protection:</b> Required
<b>Protection of Body:</b>	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

## SECTION 9: Physical and chemical properties

<b>9.1 Information on basic physical and chemical properties</b> <b>General Information</b>	
<b>Appearance: Form:</b>	Crystalline Powder
<b>Colour:</b>	White
<b>Odour:</b>	Odourless
<b>pH-value:</b>	7

<b>Melting point/Melting range:</b>	300°C
<b>Boiling point/Boiling range:</b>	Not applicable
<b>Flammability (solid, gaseous):</b>	Non- flammable.
<b>Ignition temperature:</b>	Not applicable
<b>Decomposition temperature:</b>	200°C
<b>Self-igniting:</b>	None
<b>Flash point:</b>	Not applicable
<b>Danger of explosion:</b>	None
<b>Explosion limits: Lower:</b>	Not applicable
<b>Explosion limits: Upper:</b>	Not applicable
<b>Vapour pressure:</b>	Not applicable
<b>Density at 20 °C:</b>	1.33 g/cm <sup>3</sup>
<b>Relative density:</b>	1.33
<b>Vapour density:</b>	Not applicable
<b>Evaporation rate:</b>	Not determined
<b>Solubility in / Miscibility with- water at 20 °C:</b>	Soluble
<b>Partition coefficient:(n- octanol/water)</b>	Not determined
<b>Viscosity:</b>	Not applicable

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	No reaction under normal conditions.
<b>10.2 Chemical stability</b>	This chemical is stable under storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	No data available
<b>10.4 Conditions to avoid</b>	High heat, moisture
<b>10.5 Incompatible materials</b>	Strong oxidizing agents
<b>10.6 Hazardous decomposition products</b>	Nitrogen oxides.

## SECTION 11: Toxicological information

<b>11.1 Information on toxicological effects</b>	
<b>Acute Toxicity:</b>	<b>LD50</b> (Oral, Rat): no data available <b>LD50</b> (Dermal, Rabbit): no data available <b>LC50</b> (Inhalation Rat): no data available
<b>Skin corrosion/Irritation:</b>	No data available
<b>Serious eye damage/irritation:</b>	may cause mild irritation
<b>Respiratory damage/irritation:</b>	may cause mild respiratory irritation
<b>Ingestion:</b>	may lead to gastrointestinal discomfort
<b>Germ cell mutagenicity:</b>	No data available
<b>Carcinogenicity:</b>	No data available
<b>Reproductive toxicity:</b>	No data available
<b>Specific target organ toxicity - single exposure:</b>	No data available
<b>Specific target organ toxicity - repeated exposure:</b>	In high concentrations, it May strain the kidneys
<b>Aspiration hazard:</b>	No data available
<b>Signs and Symptoms of Exposure:</b>	Refer section 2.3
<b>11.2 Additional toxicological information</b>	
<b>Biodegradability:</b>	Readily Biodegradable

## SECTION 12: Ecological information

<b>12.1 Toxicity</b> <b>Aquatic toxicity:</b>	LC50(fish): no data available EC50(daphnia): no data available EC50(algae): no data available
<b>12.2 Persistence and degradability:</b>	Readily Biodegradable
<b>12.3 Bioaccumulative potential:</b>	not bioaccumulative
<b>12.4 Mobility in soil:</b>	Low mobility
<b>12.5 Other adverse effects:</b>	No data available



## SECTION 13: Disposal considerations

13.1 Waste treatment methods	
<b>Uncleaned packaging Recommendation:</b>	dispose of in accordance with local hazardous waste regulations
<b>Recommended cleansing agents:</b>	Water, Mild Soap or Detergent, Isopropyl Alcohol, Vinegar Solution.

## SECTION 14: Transport information

<b>14.1 UN-Number · ADR, ADN, IMDG, IATA:</b>	Not applicable
<b>14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:</b>	Not applicable
<b>14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :</b>	Not applicable
<b>14.4 Packing group · ADR, IMDG, IATA:</b>	Not applicable
<b>14.5 Environmental hazards:</b>	None
<b>14.6 Special precautions for user:</b>	Handle responsibly.

## SECTION 15: Regulatory information

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU</b>	Directive 2012/18/EU, under that this substance is not classified in listed substance
<b>Named dangerous substances:</b>	This substance is not listed in the annex 1 to the directive.
<b>15.2 Chemical safety assessment:</b>	Chemical assessment has not been carried out

## SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference.

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