



**SAFETY DATA SHEET**  
(REACH Regulation (EC) N° 1907/2006 – N° 453/2010)  
**GLUCONO DELTA LACTONE**

**Section 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product Identifier**

Product Name:	Glucono Delta Lactone
REACH Registered Name:	Glucono Delta Lactone
REACH registered number:	Exemption under Annex V
CAS #:	90-80-2
EC#	202-016-5
Product Code:	82113, 82114
Synonyms:	Glucono Delta Lactone
INCI Name:	Glucono Delta Lactone

**1.2. Relevant Identified Uses of the Substance/Mixture and Uses Advised Against**

Acidulant in foods

**1.3. Details of the Supplier of the Safety Data Sheet**

Company Name:	PMP Fermentation Products, Inc. 900 NE Adams Street Peoria, Illinois 61603, USA	
Telephone:	1-309-637-0400	8 am – 4 pm CST M-F
Fax:	1-309-637-9302	
E mail:	<a href="mailto:sales@pmpinc.com">sales@pmpinc.com</a>	

**1.4. Emergency Contact**

Chemtrec: 1-(800) 424-9300

**Section 2: Hazards Identification**

**2.1. Classification of the Substance or Mixture**

Classification under CLP: This product has no classification under CLP

**2.2. Label Elements**

Label elements: This product has no label elements



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**2.3. Other Hazards**

PBT: This product is not identified as a PBT substance

**Section 3: Composition/Information on Ingredients**

**3.1. Substances**

Chemical Identity: Glucono Delta Lactone

**Section 4: First Aid Measures**

**4.1. Description of First Aid Measures**

Skin: Wash thoroughly with soap and water.

Eyes: Flush immediately with water 15 minutes. Get prompt medical attention.

Ingestion: Get medical attention if adverse effects occur.

Inhalation: Remove to fresh air, If adverse effects occur, get medical attention.

**4.2. Most Important Symptoms and Effects, Both Acute and Delayed**

Skin: May cause irritation and redness for susceptible individuals.

Eyes: May cause mild irritation. Eyes may water profusely.

Ingestion: May cause irritation if large amounts are swallowed. Nausea and stomach pain may occur. There may be vomiting and diarrhea.

Inhalation: May cause respiratory irritation in susceptible individuals. May cause shortness of breath, sneezing and coughing.

Delayed/Immediate effects: Long-term inhalation of excessive dust may cause delayed lung injury.

**4.3. Indication of Any Immediate Medical Attention and Special Treatment Need**

Immediate/Special Treatment: Eye wash stations should be available



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## Section 5: Fire Fighting Measures

### 5.1. Extinguishing Media

Extinguishing Media: Water spray  
Non-Suitable Extinguishing Media: CO2 inactive  
Powder: hazards of dust cloud formation

### 5.2. Special Hazards Arising from the Substance or Mixture

Exposure Hazards: Dust in air can be an explosion hazard.

### 5.3. Advice for Fire Fighters

Advice for Fire Fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions: Wear suitable protective clothing. Refer to section 8.  
Do not create dust.

### 6.2. Environmental Precautions

Environmental Precautions: Generally no or weak hazard for water

### 6.3. Methods and Material for Containment and Cleaning up

Clean-Up Procedures: Collect as much as possible for use or disposal in a properly labeled container. Flush remainder into normal drainage with copious amounts of water.

### 6.4. Reference to Other Sections

Reference to Other Sections: Refer to sections 8 and 13





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**Section 9: Physical and Chemical Properties**

**9.1. Information on Basic Physical and Chemical Properties**

State:	Granular powder
Color:	White
Odor:	Odorless
pH:	4 (1% aq. Solution); ~2.6 after 2 hours
Melting Point/Range:	153°C
Boiling Point:	Not applicable
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability:	Not applicable
Upper Explosion Limit:	Not applicable
Lower Explosion Limit:	30-60 g/m <sup>3</sup>
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Relative Density:	~ 0.80 kg/L
Solubility in Water:	Highly soluble, 5.9 x 10 <sup>5</sup> mg/L @ 25°C
Auto-Ignition Temperature:	400 °C
Decomposition Temperature:	Unknown
Viscosity:	Not applicable
Oxidizing:	Non-oxidizing
Molecular Weight:	178.14

**9.2. Other Information**

Other Information: Not applicable

**Section 10: Stability and Reactivity**

**10.1. Reactivity**

Reactivity: Stable under recommended transport and storage conditions

**10.2. Chemical Stability**

Chemical Stability: Stable under normal conditions

**10.3. Possibility of Hazardous Reactions**

Hazardous Reactions: Hazardous reactions will not occur under normal conditions



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**10.4. Conditions to Avoid**

Conditions to Avoid: Direct sunlight, moist air and humidity

**10.5. Incompatible Materials**

Materials to Avoid: Strong Oxidizers

**10.6. Hazardous Decomposition Products**

Hazardous Decomposition Products: In combustion, emits toxic fumes of carbon dioxide/carbon monoxide.

**Section 11: Toxicological Information**

**11.1. Information of Toxicological Effects**

Toxicity Values:

Route	Species	Test	Value	Units
Oral	Rat	LD50	>2000	mg/kg
Intravenous	Rabbit	LD50	7630	mg/kg

**Symptoms/Routes of Exposure**

Skin Contact: May cause irritation and redness for susceptible individuals.

Eyes: May cause mild irritation. Eyes may water profusely.

Ingestion: May cause irritation if large amounts are swallowed. Nausea and stomach pain may occur. There may be vomiting and diarrhea.

Inhalation: May cause respiratory irritation in susceptible individuals. May cause shortness of breath, sneezing and coughing.

Delayed/Immediate effects: Long-term inhalation of excessive dust may cause delayed lung injury.

Carcinogenicity:	Not applicable
Mutagenicity:	Not applicable
Teratogenicity:	Not applicable
Reproductive Toxicity:	Not applicable



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## Section 12: Ecological Information

### 12.1. Toxicity

Ecotoxicity Values:

Species	Test	Value	Units
Fish	96H LC50	> 1000.0	mg/L
Daphnid	48H LC50	> 1000.0	mg/L
Green Algal	96H EC50	> 1000.0	mg/L
Fish	ChV*	> 100.0	mg/L
Daphnid	ChV	> 100.0	mg/L
Algal	ChV	> 100.0	mg/L
Bacteria	EC50	> 5000.0	mg/L

- Chronic Value

### 12.2. Persistence and Degradability

Persistence and Degradability: Readily and rapidly biodegradable

### 12.3. Bioaccumulative Potential

Bioaccumulative Potential: Product does not bioaccumulate

### 12.4. Mobility in Soil

Mobility: Soluble in water

### 12.5. Results of PBT and vPvB Assessment

PBT Identification: This substance is not identified as a PBT substance.

### 12.6. Other Adverse Effects

Other Adverse Effects: Not expected to cause significant environmental impact.

## Section 13: Disposal Considerations

### 13.1. Waste Treatment Methods

Disposal Operations: In accordance with applicable regulations. Normally can be flushed down sewers.



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Recovery Operations: No information available  
Disposal of Packaging: Contaminated containers must not be treated as household waste. Where practical, containers and packaging should be recycled by a licensed contractor.

#### Section 14: Transport Information

Transport Class: This product does not require a classification for transport.

#### Section 15: Regulatory Information

##### 15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

Specific Regulations: Exemption from registration under REACH in accordance with Annex V. Commission Decision 96/335/EC establishing an inventory and a common nomenclature of ingredients employed in cosmetic products (INCI). Council Directive 76/768/EEC on the approximation of the laws of Member States relating to cosmetic products. Regulation (EC) No 1223/2009 of the European Parliament and of the Council on cosmetic products.

Directive 96/82/EC does not apply

Europe Risk Phrases *not classified in Europe*

Europe Safety Phrases *not classified in Europe*

##### 15.2. Chemical Safety Assessment

Chemical Safety Assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

#### Section 16: Other Information

Other Information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010





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There are no exposure levels set for the specific product. The following levels should be adhered to based on US regulations:

Total inhalable dust (8 hour TWA):      15 mg/m<sup>3</sup>

Legal Disclaimer:      The information herein has been compiled from sources believed to be reliable and is accurate to the best of our knowledge. However, PMP Fermentation Products, Inc. cannot give any guarantees regarding information from other sources, and expressly does not make any warranties, nor assumes any liability, for its use.

Revision Date:      8/7/13