



**SAFETY DATA SHEET**  
US Version OSHA HazCom 2012  
**S-45 A**

**Section 1: Identification of the Substance/Mixture and of the company/Undertaking**

**1.1. Product Identifier**

Product Name: S-45 A  
CAS #: 527-07-1, 7732-18-5  
EC #: None  
Product Code: 71510, 71511, 71545  
Synonyms: 2, 3, 4, 5, 6-Pentahydroxycaproic acid,  
hexanoate, S45 A DWC  
INCI Name: S-45 A

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

Chelating agent, electroplating, concrete mixtures

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

Company : 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 Number : 1-309-637-9302  
E mail: [sales@pmpinc.com](mailto:sales@pmpinc.com)

**1.4. Emergency Contact**

In case of Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC Day or Night  
Chemtrec: 1-(800) 424-9300

**SECTION 2: Hazards Identification**

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

Classification under CLP: This product has no CLP classification

GHS Classification		
<i>Health</i>	<i>Environmental</i>	<i>Physical</i>
No Classification	No Classification	No Classification



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**2.2. Label Elements**

GHS Labels; OSHA Labels                      No pictograms required.

Signal word:                                      None

Hazard Statement:                              None

**Precautionary Statement:**

Prevention

P280: Wear protective gloves and eye/face protection

P264: Wash with plenty of soap and water thoroughly after handling.

Response:

P302+352:                      IF ON SKIN: Wash with plenty of water

P332+ P313:                      If skin irritation occurs: Get medical advice

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do so.  
Continue rinsing.

P337+P313:                      If eye irritation persists. Get medical advice

**Hazards Not Otherwise Classified:**      None

**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:		Liquid Sodium Gluconate	
Component		Classification	Concentration
<b>Sodium Gluconate</b>		No classification	30%
No. CAS	527-07-1		
<b>Glucose</b>			
No CAS	50-99-7	No classification	20%
<b>Water</b>			



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No CAS	7732-18-5	No classification	50%
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**SECTION 4: First Aid Measures**

**4.1. Description of First-Aid Measures**

- Skin:** Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, seek medical attention.
- Eyes:** Flush eyes with water lifting upper and lower lids occasionally for 15 minutes. If irritation persists, seek medical attention.
- Ingestion:** Contact physician or Poison Control Center (PCC) immediately. Do NOT induce vomiting unless instructed to do so by a physician or PCC.
- Inhalation:** Move person away from exposure. If having difficulty breathing, administer oxygen. If breathing has stopped, administer artificial respiration and seek medical attention.

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

- Skin:** Can cause irritation and redness to susceptible individuals.
- Eyes:** May cause mild irritation. The eyes may water profusely.
- Ingestion:** Can cause irritation if large amounts are swallowed. You may experience nausea and stomach pain. There may be vomiting and diarrhea.
- Inhalation:** May cause respiratory irritation in susceptible individuals. Can cause shortness of breath, sneezing and coughing.

Delayed/Immediate Effects: None known

**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**

Water, carbon dioxide, foam, halogen

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

Exposure hazards: In combustion emits toxic fumes of carbon monoxide carbon dioxide.

**5.3. Advice for Fire Fighters**

Wear self-contained breathing apparatus. Wear suitable protective clothing to prevent contact with skin and eyes.

**5.4 Other Information**

None

**SECTION 6: Accidental Release Measures**

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

Use appropriate protective clothing. See section 8.

**6.2. Environmental Precautions**

: Do not discharge into drains or rivers.

**6.3. Methods and Material for Containment and Cleaning Up**

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: see sections 8 and 13



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**Section 7: Handling and Storage**

**7.1. Precautions for Safe Handling**

Use suitable protective clothing. Make sure there is adequate ventilation in the area.

**7.2. Conditions for Safe Storage, Including Any Incompatibilities**

Storage conditions: Store in a cool, well-ventilated area. Keep away from direct sunlight.

Packaging: plastic or lined poly drums.

**7.3. Specific End Use(s)**

No special requirement

**SECTION 8: Exposure Controls/Personal Protection**

**8.1. Control Parameters**

None established:

**8.2. Exposure Controls**

Engineering measures:	Provide sufficient ventilation of the area.
Respiratory protection	Respirator with particle filter
Hand Protection	Protective gloves
Eye Protection	Safety goggles, provide eye wash stations
Skin Protection	Protective clothing. Provide safety shower
Environmental:	No special requirement



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**Section 9: Physical and Chemical Properties**

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

State:	liquid
Color:	Brown to Dark Brown
Odor:	None
Odor Threshold:	Not applicable
pH:	5 - 6
Melting point:	Data not available
Boiling Point:	>100 °C
Flash point:	Data not available
Evaporation rate:	Data not available
Flammability:	Data not available
Upper Explosion Limit:	Data not available
Lower Explosion Limit:	Data not available
Vapor Pressure:	Data not available
Vapor Density:	Data not available
Specific Gravity:	1.2 – 1.3
Solubility in water:	Complete
Partition Coefficient:	Data not available
Auto-ignition Temperature:	Data not available
Decomposition Temperature:	Data not available
Freezing Point:	13.1 °F
Viscosity :	32 Cp at 25 °C
Oxidizing substances:	Non-oxidizing
Peso molecular:	Data not available

**9.2. Other Information**

Other Information: Not applicable

**SECTION 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**

Stable under recommended storage and transport conditions

**10.2. Chemical Stability**



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Stable under normal conditions

**10.3. Possibility of Hazardous Reactions**

Hazardous reactions will not occur under normal conditions

**10.4. Conditions to Avoid**

Direct sunlight

**10.5. Incompatible Materials**

Materials to Avoid:: Strong Oxidizers

**10.6. Hazardous Decomposition Products**

In combustion, emit toxic fumes of carbon dioxide/monoxide

**SECTION 11. TOXICOLOGICAL INFORMATION**

**11.1. Information on Toxicological Effects**

Toxicity Values:

Route	Species	Test	Value	Units
Oral	Rat	LD <sub>50</sub>	>2000	mg/kg
Intravenous	Rabbit	LD <sub>50</sub>	7630	mg/kg

**Symptoms/Routes of Exposure**

Contact on  
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.



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Delayed/Immediate effects: None known

Carcinogenicity: Not a carcinogen (IARC, ACGIH, NTP, OSHA)  
Mutagenicity: Not applicable  
Teratogenicity: Not applicable  
Reproductive Toxicity: Not applicable

## 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

Readily and rapidly biodegradable

### 12.3. Bioaccumulative Potential

Product does not bioaccumulate

### 12.4. Mobility in Soil

Accidental spillage may lead to penetration in the soil and groundwater, however; there is no evidence that this would cause adverse ecological effects.

### 12.5. Results of PBT and vPvB Assessment

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





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**12.6. 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.

**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

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**SECTION 14: TRANSPORT INFORMATION**

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

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/CAO	Not Dangerous Goods

**SECTION 15: REGULATORY INFORMATION**

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

**US Regulations**

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.



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**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

No SARA Hazards

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

	CAS-No.
Sodium gluconate	527-07-1
Glucose	50-99-7

**New Jersey Right To Know Components**

	CAS-No.
Sodium gluconate	527-07-1
Glucose	50-99-7

**Rhode Island Right To Know Components**                      Not Listed

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**TSCA**                      This product is listed on TSCA

**International Regulations**

**Europe**

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



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**Inventory Listing**

Nation	Regulation	Sodium Gluconate	Glucose
Australia	AICS	Yes	Yes
Canada	DSL	Yes	Yes
Canada	WHMIS	No	No
China	IECSC	Yes	Yes
Europe	EC No	208-407-7	200-075-1
Japan	ENCS	(2) 14-10	8-46
Korea	ECL	KE-17676	KE-17727
Philippines	PICCS	Yes	Yes

**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 OSHA HazCom 2012

There are no exposure levels set for the specific product.

**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.

Date of Revision    03/10/23