1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Gluconic Acid 50%

Formula: $C_6H_{12}O_7$ + Water

Chemical Name: Gluconic Acid, Solution in water

Responsible Company: PMP Fermentation Products, Inc.

900 NE Adams St, Peoria, IL 61603

Product Use: Chelating agent

Information Phone No. (309) 637-0400 8 am – 4 pm CST M-F

Chemtrec Phone No (800) 424-9300

2 HAZARDS IDENTIFICATION

Inhalation: Breathing of mist or liquid can cause respiratory irritation and burns.

Skin: Can cause irritation and skin burns.

Eyes: Can cause eye damage

Ingestion: Can cause irritation and burning in throat.

NFPA Ratings: HEALTH 1 FIRE 0 REACTIVITY 0 Canadian WHMIS: Controlled Product Hazard Class: E

3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u> <u>CAS No.</u>

Gluconic Acid 526-95-4

4 FIRST AID MEASURES

Inhalation: Remove to fresh air. Get medical attention.

Skin: Remove contaminated clothing. Wash thoroughly with soap and

water. Get medical attention if burns persist.

Eyes: Flush immediately with water or physiological saline for 15 minutes.

Get prompt medical attention.

Ingestion: Drink lots of water. Get medical attention if effects persist.

Other Important Medical or Precautionary Information: None.

5 FIRE FIGHTING MEASURES

Flash Point (Method): <u>n/a</u> Explosion Limits: Upper: <u>n/a</u> Lower: <u>n/a</u>

Extinguishing Media: Water

Special Firefighting Procedures and Hazards: Avoid skin and eye contact. Use

appropriate firefighting equipment

6 ACCIDENTAL RELEASE MEASURES

Spills and Leaks:

Small spills can be flushed into normal drainage, into ground with copious amounts of water or taken up with absorbent material. Larger spills should be contained by diking or otherwise held for collection and disposal. Do not allow contact with skin or eyes. Spills tend to be tacky and slippery.

7 HANDLING AND STORAGE

Storage and Handling: Use corrosion-resistant containers. Store at

temperatures above 60°F to prevent

crystallization

Empty Containers: Rinse well before handling

Other Precautions: Product is tacky and slippery on floors.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

TLV CARCINOGEN

None none no

Inhalation: Wear approved vapor/mist respirator if exposure is likely.

Skin: Wear protective gloves, boots and clothing. Provide convenient

safety showers.

Eyes: Wear splash proof goggles. Provide convenient eyewash stations.

Ingestion: Avoid swallowing. Wear face shield.

Most likely route of entry: Skin, eyes

9 CHEMICAL AND PHYSICAL PROPERTIES

Appearance: Light yellow liquid Boiling Point: 674° F

Odor: slight acetous Freezing Point: $60^{\circ}F$ (xtalizes) pH: 1.1 - 1.5 Spec Gravity ($H_2O=1$): 1.2

Water Solubility: Complete Vapor Pressure (mmHg):5 x 10⁻²¹

Viscosity, Cp @ 25°C: 32 Melting Point: 130-132

10 STABILITY AND REACTIVITY

| Stable: _ | Х | _ Unstable: | Precaution | S: | |
|-----------|---------|-----------------|--------------------|-----------------|---|
| Incompa | tibilit | y: None | | | |
| Hazardo | us D | ecomposition P | roducts: <u>n/</u> | <u>'a</u> | |
| Hazardo | us P | olymerization C | ccurs: | Does Not Occur: | Χ |

11 TOXICOLOGICAL INFORMATION

LD50 (rat) > 2000 (mg/kg bw)

Carcinogenicity

Mutagenicity

Teratogenicity

Reproductive Toxicity

Not applicable

Not applicable

Not applicable

12 ECOLOGICAL INFORMATION

Predicted toxicity values are:

 $\begin{array}{lll} Fish 96\text{-h LC50} & > 1000.0 \text{ mg/L} \\ Daphnid 48\text{-h LC50} & > 1000.0 \text{ mg/L} \\ Green algal 96\text{-h EC50} & > 1000.0 \text{ mg/L} \\ Fish Chronic Value (ChV) & > 100.0 \text{ mg/L} \\ Daphnid ChV & > 100.0 \text{ mg/L} \\ Algal ChV & > 100.0 \text{ mg/L} \\ \end{array}$

Biological Fate: No bioconcentration in aquatic organisms and rapid biodegradation/disappearance in the environment, i.e. 40% in 5 days.

13 DISPOSAL CONSIDERATIONS

Waste Disposal: In accordance with applicable regulations for liquid wastes.

Not a hazardous waste under RCRA criteria.

14 TRANSPORT INFORMATION

DOT Shipping Name: None DOT: Not Regulated

15 REGULATORY INFORMATION

Reportable for SARA Title III, S.313 (Form R): None

Inventory Status:

| TSCA | USA | Yes |
|---------------|-----------|-----|
| DSL | Canada | Yes |
| EINECS | Europe | Yes |
| AICS | Australia | Yes |
| MITI | Japan | Yes |

State and Local Regulations

CARB (ARB Method 310) LVP-VOC

16 OTHER INFORMATION

Revision Date: 11/3/11

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.