



SHANDONG KAISON BIOCHEMICAL CO., LTD

No 52 Yanye Road, Wulian County Shandong China Tel:

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MATERIAL SAFETY DATA SHEET OF GLUCONO ACID 50% FOOD GRADE

Product: Gluconic Acid 50%

Review Date:23/03/2021

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMMERCIAL PRODUCT NAME Gluconic Acid 50% Food Grade

2. COMPANY/SUPPLIER SHANDONG KAISON BIOCHEMICAL CO.LTD.

NO.52,YANHE ROAD, WULIAN COUNTY,SHANDONG,CHINA

Emergency Phone 86 156 06330617 24HOURS

PRODUCT USE: Food Additive, Cleaning and Pickling metals, Sequestrant, Cleansers, Paint Strippers. MSDS Revision July 17, 2010 reason for revision: reclassification and reformatting.

3. COMPOSITION, INFORMATION ON INGREDIENTS

CHEMICAL NAME OF THE MATERIAL :Gluconic Acid solution in water

CHEMICAL FORMULA: $C_6H_{12}O_7$ + 50% water

CHEMICAL FAMILY:Organic acid, aqueous solution

SYNONYMS :D-Gluconic Acid, Dextronic acid, maltonic acid, glyconic acid, glycogenic acid, pentahydroxycaproic acid,

COMPOSITION	CAS Reg. No.	%
Gluconic Acid	526-95-4	Min. 50
Water	7732-18-5	Max. 50

HAZARDOUS IMPURITIES :None

4. HAZARDS IDENTIFICATION

Classification Xi, R36

Most important hazards Irritating to eyes.

5. FIRST AID MEASURES

General advice : No hazards which require special first aid measures. If you feel unwell, seek medical advice.

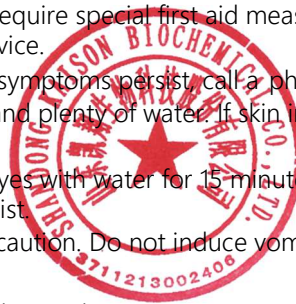
Inhalation : Move to fresh air. If symptoms persist, call a physician.

Skin contact: Wash off with soap and plenty of water. If skin irritation persists, call a physician.

Eye contact: Immediately Flush eyes with water for 15 minutes. If eye irritation persists, consult a specialist.

Ingestion: Drink water as a precaution. Do not induce vomiting. Get medical attention.

Protection of first-aiders: Use personal protective equipment.





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6. FIRE FIGHTING MEASURES

FLASH POINT: not applicable

FLAMMABLE LIMITS: not applicable

Autoignition temperature: not applicable

General Hazards: Acid reacts with most metals to release hydrogen gas which can form explosive mixtures.

Suitable extinguishing media : water, water spray, dry powder, foam, carbon dioxide (CO₂)

Extinguishing media which:

must not be used for safety reasons None

Hazardous decomposition products carbon oxides

Special protective equipment

Use personal protective equipment including self-contained breathing apparatus when fighting fire in enclosed area.

Specific methods

Standard procedure for chemical fires.

7. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment.

Environmental precautions

Dispose according to federal, state and local authorities. Methods

for cleaning up

Small spills can be flushed into normal drainage 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. Can be neutralized with lime or soda. After cleaning, flush away traces with copious amounts of water.

Is a hazardous waste under current RCRA criteria.

8. HANDLING AND STORAGE

HANDLING

Technical measures/Precautions :No special technical protective measures required.

Safe handling advice:

Use personal protective equipment.

STORAGE

Technical measures/Storage conditions: Keep tightly closed. Keep at temperatures above 15°C(to avoid risk of crystallisation.) Crystallization will affect the physical condition but will not damage the material. If crystallized, warm and stir before using

Incompatible products :

No special restrictions on storage with other products.

Packaging material :

Store in original container.

9. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering measures :Provide general dilute ventilation. Eye wash and safety shower available to work area.

Exposure limit(s): None established for this ingredient,

use OSHA PEL, ACGIH TLV for Nuisance dusts of 5 mg/ m³.

Personal protection equipment

Respiratory protection

Not required unless aerosols are produced.



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Hand protection	Gloves
Eye Protection	Safety glasses
Skin and body protection	Lightweight protective clothing
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice

10. PHYSICAL AND CHEMICAL PROPERTIES

Form	aqueous solution, approx. 50%
Color	yellow/brown
Odor	slight acetous
pH (10%)	1.2-1.3
Vapor pressure	not available
Vapor density	not applicable
Boiling point	>100 °C
Freezing Point	~15 °C, ~60 °F crystallizes
Evaporation rate	not applicable
Coefficient of water/oil distribution	not available
Melting point/range	not applicable
Decomposition temperature	not applicable
Relative density	1.23
Bulk density	
Explosive properties	none
Water solubility g/kg	miscible
Other information	
# Viscosity	approx. 30 mPa.s

11. STABILITY AND REACTIVITY

Stability	Stable at normal conditions, Hazardous polymerisation does not occur.
Conditions to avoid	Keep tightly closed in a dry place above 15°C to avoid risk of crystallisation.
Materials to avoid	Incompatible strong bases and oxidizers.
Hazardous decomposition products	No decomposition if stored normally. Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous polymerization	Does Not occur

12. TOXICOLOGICAL INFORMATION

The following toxicological data shown are those obtained from tests on products of similar composition (in accordance with EC-Directive 1999/45/EC).

Acute toxicity	LD50/p.o./rat = 5940 mg/kg bw (1)
	LD50/p.o./mouse = 6800 mg/kg bw (1)
	LD50/p.o./rabbit = 7850 mg/kg bw (1)
	LD50/p.o./hamster = 5600 mg/kg bw (1)





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Local effects Irritating to eyes. May cause skin irritation in susceptible persons.
Chronic toxicity no data available

Human experience Health injuries are not known or expected under normal use.

13. ECOLOGICAL INFORMATION

Mobility completely soluble
Persistence and degradability
Chemical oxygen demand 897 mg O₂/g
Biochemical oxygen demand within 5 days (BOD₅) = 634 mg/O₂/g
Readily biodegradable 98% after 3 days
Bioaccumulation no data available
Ecotoxicity effects Toxicity to fish LD₅₀=360 mg/l Toxicity to bacteria EC₀. 10,000 mg/l

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14. TRANSPORT INFORMATION

Not regulated by IMO/IMDG
DOT Classification: Not a DOT controlled material (United States). Identification: Not applicable.
Special Provisions for Transport: Not applicable.
Not a Hazardous Material for DOT shipping.

15. DISPOSAL CONSIDERATIONS

Waste from residues/unused products Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environmental agency specific rules).

Is a hazardous waste under current RCRA criteria.

16. REGULATORY INFORMATION

The ingredients are listed on the TSCA Inventory List.
CERCLA (Comprehensive Response Compensation and Liability Act): HMIS Health=2, Fire=0, Reactivity=0, Persistence=0
SARA Title III (Superfund Amendments and Reauthorization Bill): Not Considered Hazardous

17. OTHER INFORMATION

HMIS* Health=2, Fire=0, Reactivity=0

*Hazardous Material Information System of the National Paint and Coating Association. MSDS Status: Revised 17/07/10 by Technical Service Department of SHANDONG KAISON BIOCHEMICAL CO.,LTD.. to update exposure information.

Reviewed 17/07/2010, reviewed, 30/12/2014, reviewed, 23/03/2021

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