

MATERIAL SAFETY DATA SHEET

JUNGBUNZLAUER INC.

Product: Calcium Lactate Gluconate

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Reviewed: 11/16/2009

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMMERCIAL PRODUCT NAME	Calcium Lactate Gluconate
COMPANY/SUPPLIER	Jungbunzlauer Inc. 7 Wells Avenue Newton Centre, MA 02459
Emergency Phone	1- 617-969-0900; 8:30 - 5:00 M-F Eastern Time
24 Hour Emergency Phone Number	CHEMTREC 1-800-424-9300
PRODUCT USE	calcium source in foods, beverages, nutritional supplements

2. COMPOSITION, INFORMATION ON INGREDIENTS

CHEMICAL NAME OF THE MATERIAL	Calcium Lactate Gluconate	
CHEMICAL FAMILY	Salts of Organic Acid	
SYNONYMS	Calcium Lactogluconate	
CHEMICAL CHARACTERIZATION	Calcium Lactate	Calcium Gluconate
CAS Reg. No.	814-80-2	299-28-5
EC No.	212-406-7	206-075-8
CHEMICAL FORMULA	$(C_3H_5O_3)_2 Ca_2$	$(C_6H_{11}CaO_7)_2 Ca_2$
HAZARDOUS IMPURITIES	None	

3. HAZARDS IDENTIFICATION

Emergency Overview	Fine white almost odorless powder, considered non-toxic.
Most important Hazard	None
Carcinogen status	None

4. 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	Flush with water.
Eye contact	Flush eyes with water as a precaution. If eye irritation persists, consult a specialist.
Ingestion	No emergency action anticipated.
Protection of first-aiders	No hazards which require special first aid measures.

5. FIRE FIGHTING MEASURES

FLASH POINT	>100°C Closed Cup
FLAMMABLE LIMITS	N/A
Autoignition temperature	Not Known
General	Negligible fire hazard. Dust/Air may form explosive mixture.
Suitable extinguishing media	Use extinguishing agents for surrounding materials.
Extinguishing media which must not be used for safety reasons	None
Hazardous decomposition products	Thermal decomposition may result in toxic fumes of calcium and carbon monoxide and carbon dioxide.
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.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Use personal protective equipment. Avoid dust formation.
Environmental precautions	Dispose according to federal, state and local authorities.
Methods for cleaning up	Sweep up and shovel. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

HANDLING

Technical measures/Precautions	No special technical protective measures required.
Safe handling advice	No special handling advice required.

STORAGE

Technical measures/Storage conditions	Keep tightly closed in a dry and cool place.
Incompatible products	No special restrictions on storage with other products.
Packaging material	Store in original container.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering measures	Provide general dilute ventilation.
Exposure limit(s)	None established for this ingredient, use OSHA PEL, ACGIH TLV for Nuisance dusts of 5 mg/ m ³ .

Personal protection equipment

Respiratory protection	NIOSH approved dust respirator recommended
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

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	powder or granules
Color	white/ off-white
Odor	odorless or nearly odorless
PH (10% solution)	6.0 – 8.0
Vapor pressure	N/A
Vapor density	N/A
Boiling point	Unknown
Evaporation rate	N/A
Coefficient of water/oil distribution	Unknown
Melting point/range	N/A
Decomposition temperature	>170°C
Relative density	Unknown
Bulk density	300 to 600 kg/m ³
Explosive properties	Unknown
Water solubility	g/kg ~400g/l @ 25°C

10. STABILITY AND REACTIVITY

Stability	Stable at normal conditions
Conditions to avoid	Keep containers dry and tightly closed to avoid moisture absorption and contamination.
Materials to avoid	None known.
Hazardous Polymerization	Does not occur.

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11. TOXICOLOGICAL INFORMATION

Acute toxicity	Not available
Local effects	Not available
Chronic toxicity	None known
Human experience	No injuries known or expected under normal use.

12. ECOLOGICAL INFORMATION

Mobility	Completely soluble
Persistence and degradability	
Chemical oxygen demand	696 mg O ² /g (type CLG 10) 559 mg O/g (type LG 13)
Biochemical oxygen demand within 5 days (BOD5)	= Not available
Bioaccumulation	Not available
Ecotoxicity effects	Not available

13. 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 for specific rules).
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14. TRANSPORT INFORMATION

Not a Hazardous Material for DOT shipping.

15. REGULATORY INFORMATION

The components are generally regarded as safe (GRAS) by USA FDA. 21 CFR Listed European Food Additive E327 (Calcium Lactate) and 578 (Calcium Gluconate)

The ingredients are listed on the TSCA Inventory List. CERCLA (Comprehensive Response Compensation, and Liability Act): Canadian DSL (Domestic Substance List)

SARA Title III (Superfund Amendments and Reauthorization Bill): Not Considered Hazardous

To the best of our knowledge, Jungbunzlauer Calcium Lactate Gluconate does not contain any contaminants or bi-products known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act.

16. OTHER INFORMATION

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

Hazardous Material Information System of the National Paint and Coating Association.

MSDS Status: Reviewed 11/16/2009

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