

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Calcium Formate

Other names or synonyms: Calcium diformate; Calcoform; Formic acid, calcium salt.

Recommended uses: For use in Animal feeds: as feed additive, silage preservation agents, etc.

Restrictions on use: Not intended for human consumption.

Details of the supplier of the safety data sheet

Supplier Pestell Nutrition

Address 141 Hamilton Rd
New Hamburg, Ontario
Canada, N3A 2H1

Phone 519-662-2877

Email qa@pestell.com

Emergency telephone number (24 hr) Canada: CANUTEC 1 613-996-6666
US: CHEMTREC 1 703-527-3887

2. HAZARDS IDENTIFICATION

Hazard classification:GHS Causes serious eye damagea Category 1, H318

Pictograms:



Signal word: DANGER

Hazard statements: H318 Causes serious eye damage.

Precautionary statements: PREVENTION:
P280 Wear protective gloves/protective clothing/eye protection/face protection.

RESPONSE:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician.

STORAGE: Not applicable

DISPOSAL: Not applicable

Other Hazards: Not classified as other hazards.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation:	Substance
Ingredient:	Calcium Formate
Formula:	Ca(HCOO)
Concentration:	98-100%
CAS number:	544-17-2
EC number:	208863-7

4. FIRST AID MEASURES

Skin:	Take off contaminated clothing, flush skin with plenty of water and soap.
Eyes:	Rinse cautiously with tempered water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Ingestion:	Rinse mouth with water and drink water. If large amount been ingested get medical advice/attention.
Inhalation:	Move to fresh air. Rinse mouth with water. If irritation persists get medical advice/attention.
Symptoms and effects:	SKIN: Not a skin irritant. EYE: Stinging, tearing, redness, pain. INHALATION: Coughing, sneezing, etc. INGESTION: Vomiting, nausea, etc.
Advice to doctor:	No special antidote. Treat symptomatically.

5. FIREFIGHTING MEASURES

Extinguishing media:	This product does not burn or support combustion. Use extinguishing media appropriate for surrounding fire. Unsuitable extinguishing agents: Water with full jet
Hazards:	This product is non-flammable but in case of fire, oxides of carbon and calcium can be released.
Advice for fire-fighters:	Wear a self-contained breathing apparatus with full protective clothing in case of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear tightly sealed goggles, protective gloves and if dusty conditions dust filter mask. Ensure adequate ventilation.
Environmental precautions:	Prevent entry into sewers or streams and other water bodies.
Disposal methods:	Cover to prevent dust formation. Use appropriate tools to put the spilled material into a sealed container and hold for reuse or later disposal. Clean the affected area carefully with water.

7. HANDLING AND STORAGE

Handling:	Avoid breathing dust. Avoid contacting skin, eyes and clothing. Use with adequate ventilation. No smoking, eating and drinking water at workplace. Avoid prolonged or repeated exposure.
Storage:	No special requirements. Store in dry place Keep away from high temperature, moisture, incompatible materials and avoid physical damages
Precautions:	Please pay attention to SECTION 10 CONDITIONS TO AVOID and INCOMPATIBLE MATERIALS.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:	- CHINA GBZ 2.1-2007: No data for Calcium Formate. - OSHA PEL: not available. - ACGIH TLV: not available
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Engineering controls:	Use adequate exhaust ventilation to keep airborne concentrations below the allowable exposure limits.
Respiratory protection:	Dustproof respirators when dusts are generated.
Hand protection:	Protective gloves, leather, rubber or plastic.
Eye protection:	Chemical goggles or safety glasses.
Skin and body protection:	Resistant protective clothing.
Hygiene precautions:	No smoking, eating and drinking water at workplace. Washing hands before eating. Taking bath after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Solid white or slightly yellowish white crystal or crystalline powder
Odor:	Slightly acidic.
Odor Threshold:	Not applicable.
pH value:	6.0-9.0 (10% aqueous solution)
Melting/freezing point:	Melting point: >300 ⁰ C (OECD 102)
Boiling point:	Not relevant; the sample decomposes before boiling.
Flash point:	Not applicable
Evaporation rate:	Not applicable to solids.
Flammability:	No flammability, explosiveness or auto-inflammability properties.
Upper/lower flammability or explosive limits:	Not applicable
Vapor pressure:	2.2 x 1 04 Pa (calculation, 25 ⁰ C)
Vapor density:	Not applicable
Relative density:	2 gc/m ³ (ISO 1 1831-1000 1200kg/m ³ (bulk density)
Solubility:	172 g/L (OECD 105)
Partition coefficient : (n-octanol/water)	-2.6 log POW (OECD 107)
Auto-ignition temperature:	Not applicable
Decomposition temperature:	(OECD 102)
Viscosity:	Not relevant

10. STABILITY AND REACTIVITY

Reactivity:	Dangerous reactions are not expected under ambient and anticipated temperature and handling conditions of temperature and pressure
Chemical stability:	Stable under ambient and anticipated temperature and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	No polymerization will occur. No dangerous reactions known.
Conditions to avoid:	High temperatures, moisture.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, calcium oxide

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Oral LD50: 3050 mg/kg (rat) (OECD 401) Dermal LD50: >2000 mg/kg (rat) (OECD 402) Inhalation LC50/4h: >0.67 mg/l (rat) (EPA OTS 798.1150)
Skin irritation/corrosion:	No irritating effect
Eye damage/irritation:	Causes serious eye damage
Respiratory or skin sensitization:	No skin sensitization
Germ cell mutagenicity:	Not mutagenic.
Carcinogenicity:	Not listed as a suspected / confirmed carcinogen by IARC, NTP
Production toxicity:	Reports show no adverse effect on reproduction.
STOT -single exposure:	No experimental or epidemiological sufficient evidence for specific target organ toxicity (single exposure).
STOT -repeated exposure:	No experimental or epidemiological sufficient evidence for specific target organ toxicity (repeated exposure).
Aspiration hazard:	Not available.
Routes of entry:	Eye contact.
Chronic exposure:	No information available.
Other information:	No more information available,

12. ECOLOGICAL INFORMATION

Toxicity:	LCO/96h: >1000 mg/l (fish); LCO/48h: >1000 (fish); EC50/3h: >10000 mg/l (bacteria); This product is not regarded as dangerous for environment.
Persistence and biodegradability:	The product is readily biodegradable BOD28: 86% (OECD 306); BOD28/COD: >10% (OECD 301)
Bio -accumulative potential:	Do not bioaccumulate or biomagnify.
Mobility in soils:	The substance is not expected to adsorb to a high degree to suspended solids and sediment based upon the log Koc which indicates a moderate to high mobility in soil. Log Koc 1.49 (-)
Results of PBT and vPvB assessment:	Not applicable.
Other adverse effects:	No more information available.

13. DISPOSAL CONSIDERATIONS

Methods of disposal:	Dispose of in accordance with all government regulations. Avoid release to the environment.
Contaminated packaging:	Dispose of the packaging in accordance with all government regulations.

14. TRANSPORT INFORMATION

IMDG:	Not Regulated as Dangerous Goods Hazard Class: Not Applicable Packing Group: Not Applicable Proper Shipping name: Not Applicable Marine Pollutant: No
ADR/RID:	NOT Regulated as Dangerous Goods Hazard Class: Not Applicable Packing Group: Not Applicable Proper Shipping name: Not Applicable

ITAT: NOT Regulated as Dangerous Goods.
Hazard Class: Not Applicable.
Packing Group: Not Applicable.

DOT (U.S.): DOT Shipping Name: Not Regulated
DOT Hazardous Class: Not Applicable.
DOT UN Number: Not Applicable
DOT Packing Group: Not Applicable.
DOT Reportable Quantity (lbs): Not Available.
Note: No additional remark.
Marine Pollutant: No

TDG (Canada): TDG Shipping Name: Not Regulated.
Hazard Class: Not Applicable
UN Number: Not Applicable.

Packing Group: Not Applicable.
Note: No additional remark
Marine Pollutant: No.

15. REGULATORY INFORMATION

China. GB 122682012 List of Dangerous goods: Not regulated.
Catalog of Hazardous Chemicals (2015): Not regulated.
List of Severely Restricted Toxic Chemicals for Export and Import: Not regulated.
GB 182182009 Identification of major hazard installations for dangerous chemicals: Not regulated.
Inventory of existing chemical substances in China (IECSC) 2013: Listed.

Other countries: Please refer to any applicable national and international regulations on the hazard and safety of this product.

16. OTHER INFORMATION

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Pestell Nutrition and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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