



Fleischmann's Double Acting Baking Powder (NON-GMO)

MSDS Number: 02414

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## 1. Company and Product Identification

### *Clabber Girl Corporation*

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Fleischmann's Double Acting Baking Powder (NON-GMO)

Sodium Acid Pyrophosphate

Sodium Bicarbonate

Cornstarch (Non-genetically modified)

Monocalcium Phosphate

## 2. Information on Ingredients

### Sodium Acid Pyrophosphate

CAS Number: 7758-16-9

Chemical Name: Sodium Acid Pyrophosphate

Synonyms: SAPP; Disodium Diphosphate; Pyrophosphoric acid, disodium salt;  
Disodium Dihydrogen Pyrophosphate

### Sodium Bicarbonate

CAS Number: 144-55-8

Chemical Name: Sodium Bicarbonate

Synonyms: Baking Soda

### Cornstarch(Non-genetically modified)

CAS Number: 9005-25-8

Chemical Name: Starch

**Synonyms:** Corn starch; corn starch with mineral oil added; corn starch with flow agent added, native starch, unmodified starch.

**Monocalcium Phosphate**

**CAS Number:** 10031-30-8

**Chemical Name:** Phosphoric Acid, Calcium Salt Monohydrate

**Synonyms:** MCP, Monobasic Calcium Phosphate Monohydrate

### 3. Hazards Identification (Per Ingredient)

**Sodium Acid Pyrophosphate:**

**Hazard Description:** N/A

**Information pertaining to particular dangers for man and environment:** N/A

**Classification System:**

**NFPA ratings (scale 0-4)**

H-0

F-0

R-0

**HMIS ratings (scale 0-4)**

H-0

F-0

R-0

**Sodium Bicarbonate:**

**HMIS Rating:** Health 0; Fire 0; Reactivity 0

**Emergency Overview:**

**Appearance and Odor:** White crystalline powder with no odor.

Not a fire hazard.

**Warning Statements:**

No significant health or environmental effects associated with this material.

**Potential Health Effects:**

- **Eye Contact:** Not an eye irritant.
- **Skin Contact:** Not a skin irritant.
- **Inhalation:** None known.
- **Ingestion:** Material is practically non-toxic. Small amounts (1-2 tablespoonfuls) swallowed during normal handling operations are not likely to cause injury as long as the stomach is not overly full: swallowing larger amounts may cause injury
- **Subchronic effects/Carcinogenicity:** Based on published studies on its effects in animals and humans, sodium bicarbonate is not teratogenic or genotoxic. Only known subchronic affect is that of a marked systemic alkalosis. Not classified as carcinogenic by NTP, IARC, OSHA, ACGIH or NIOSH.

**Cornstarch**(Non-genetically modified);

HMIS Rating: Health 1; Fire 1; Reactivity 1

**Emergency Overview:**

Appearance and Odor: White to slightly yellow powder and starch-like odor.

**Warning Statements:**

Poses little or no immediate hazard, material will burn, is a very fine powder. Starch products with "Instant" in brand name will absorb water and become sticky: products without the "Instant" designation are water insoluble.

**Potential Health Effects:**

- **Eye Contact:** Dust may irritate the eyes. Exposure may cause eye tearing, redness, and discomfort.
- **Skin Contact:** Prolonged and repeated contact to skin may cause transient irritation.
- **Inhalation:** Dust may irritate the mucous membranes and respiratory tract. Exposure may cause coughing, asthmatic breathing and breathlessness.
- **Ingestion:** Not an ingestion hazard. This product is generally a food additive. Product is insoluble and may cause gastrointestinal discomfort.

Target organs: Eyes, respiratory system, skin.

OSHA Regulatory Status: Hazardous

**Monocalcium Phosphate:****Emergency Overview:**

Appearance and Odor: White crystals with no odor

**Warning Statements:**

May cause skin and eye irritation.

No significant hazards associated with this material.

**Potential Health Effects:**

Likely Routes of Exposure: Skin contact and inhalation

- **Eye Contact:** No more than slightly irritating based on toxicity studies. The dry powder may cause foreign body irritation in some individuals.
- **Skin Contact:** No more than slightly toxic or irritating based on toxicity studies. Prolonged contact with the dry powder may cause drying or chapping of the skin.
- **Inhalation:** Inhalation of the dust may cause coughing and sneezing, upper respiratory tract irritation.
- **Ingestion:** Not toxic if swallowed based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed. Ingestion of large quantities may cause abdominal cramps, nausea, vomiting, diarrhea.

**Chronic Effects:**

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

**4. First Aid Measures****Sodium Acid Pyrophosphate:**

**General Information:** No special measures required  
**After inhalation:** Supply fresh air; consult doctor in case of complaints.  
**After skin contact:** Generally the product does not irritate the skin.  
**After eye contact:** Rinse opened eye for several minutes under running water.  
**After swallowing:** If symptoms persist consult doctor

**Sodium Bicarbonate:**

**EYES:** Check for and remove contacts. Flood eyes with clean flowing water, low pressure and luke warm (not hot) if possible, occasionally lifting eyelids.

**INGESTION:** If large amounts of this material are swallowed, do not induce vomiting. Administer water if person is conscious. Never give anything by mouth to an unconscious person.

**NOTE TO PHYSICIAN:** Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

**Cornstarch(Non-genetically modified):**

**INHALATION:** If symptomatic, move to fresh air. Get medical attention if symptoms persist.

**EYE CONTACT:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

**SKIN CONTACT:** Wash with soap and water. Get medical attention if symptoms occur.

**INGESTION:** Seek medical advice.

**Monocalcium Phosphate:**

**IF IN EYES OR ON SKIN**, immediate first aid is not likely to be required. However this material can be removed with water. Wash heavily contaminated clothing before reuse.

**IF INHALED**, immediate first aid is not likely to be required. However, if symptoms occur, remove to fresh air. Remove material from eyes, skin, and clothing.

**IF SWALLOWED**, a small amount will most likely not require immediate first aid. If large amounts are swallowed and the person is conscious and alert, give 2-3 glasses of water to drink and induce vomiting by touching back of throat with a finger. Do not induce vomiting or give anything to an unconscious person. Seek immediate medical attention and do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallow product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical. A physician or Poison Control Center can be contacted for advice. Wash heavily contaminated clothing before reuse.

**MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:** Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

## 5. Fire-Fighting Measures

### Sodium Acid Pyrophosphate:

Suitable extinguishing agents: CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment: No special measures required.

### Sodium Bicarbonate:

Flashpoint:

Not combustible

Method Used:

Not applicable

Extinguishing Media:

Not-combustible material. Use extinguishing media appropriate for surrounding fire

Fire-Fighting Instructions:

Carbon Dioxide may be generated making necessary the use of a self-contained breathing apparatus (SCBA) and full protective equipment (Bunker Gear). Carbon dioxide is an asphyxiant at levels over 5% w/w. Sodium oxide, another thermal decomposition product existing at temperatures above 1564F is a respiratory, eye, and skin irritant. Avoid inhalation, eye and skin contact with sodium oxide dusts.

**Unusual Fire and Explosion Hazards:** None known

**Cornstarch(Non-genetically modified):**

**Extinguishing Media:** Water spray, dry chemical, carbon dioxide or material appropriate for the surrounding fire.

**Unsuitable Extinguishing Media:** None known

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing.

**Unusual Fire and Explosive Hazards:** Powdered material may form explosive dust-air mixtures.

**Hazardous Combustion Products:** Carbon oxides, nitrogen oxides.

**Monocalcium Phosphate:**

**Flash Point:** Not combustible

**Hazardous Products of Combustion:** Not applicable

**Extinguishing Media:** Not applicable

**Unusual Fire and Explosion Hazards:** None known

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

**6. Accidental Release Measures**

**Sodium Acid Pyrophosphate:**

**Person-related safety precautions:** Not required.

**Measures for environmental protection:** Do not allow to enter sewers/surface or ground water.

**Measures for cleaning/collecting:** Pick up mechanically

**Additional information:** No dangerous substances are released.

**Sodium Bicarbonate:**

Scoop up into dry, clean containers. Wash away uncontaminated residue with water.

**Cornstarch(Non-genetically modified):**

**Personal Precautions:** Wear appropriate personal protective equipment.

**Spill Cleanup Methods:**

**Small spills:** Sweep up and place in a clearly labeled container for waste. Avoid dust generation.

**For large spills:** Physical cleanup of starch – while minimizing dust generation, followed by final flushing of spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

**Monocalcium Phosphate:**

In case of spill, sweep, scoop or vacuum and remove. Flush residual spill area with water.

## 7. Handling and Storage

**Sodium Acid Pyrophosphate:**

**Information for safe handling:** No special measures required.

**Information about protection against explosions and fires:** No special measures required.

**Information on Storage: Requirements to be met by storerooms and receptacles:** None

**Storage in one common storage facility:** None

**Store in cool, dry conditions in well sealed receptacles. Protect from humidity and water.**

**Sodium Bicarbonate:**

**Store in cool, dry area and away from incompatible substances.**

**Sodium Bicarbonate reacts with acids to yield carbon dioxide gas which can accumulate in confined spaces. Do not enter confined spaces until they have been well ventilated and carbon dioxide and oxygen levels have been determined to be safe.**

**Cornstarch(Non-genetically modified):**

**Handling:** Proper sanitation with food grade products is essential. Wear appropriate personal protective equipment. Avoid contact with eyes. Avoid breathing dust. Avoid dust generation. Wash thoroughly after handling. Use only with adequate ventilation.

**Prevention of Fire and Explosion:** Keep away from heat and ignition sources. Keep from contact with oxidizing materials. Minimize dust generation and accumulation. Avoid welding in area of dry product if there is a high concentration of dust. In the United States, refer to NFPA Pamphlet No.654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries."

**Storage:** Store container in a well-ventilated odor-free area with dry conditions. Starches stored beyond the best before date should be tested periodically for fitness for use.

**Bulk Storage:** Bulk storage vessels are recommended to be fitted with dust control equipment and explosion protection devices.

**Monocalcium Phosphate:**

**Handling:** Handle in accordance with Good Industrial Hygiene and Safety Practices. These practices should include avoiding unnecessary exposure and removal of material from eyes, skin, and clothing.

**Storage:** Store in a cool, dry place to maintain product performance.

**8. Exposure Control/Personal Protection**

**Sodium Acid Pyrophosphate:**

**Components with limit values that require monitoring at the workplace:** Not required.

**Personal protective equipment and general protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:** Not required

**Protection of Hands:** Protective gloves

**Glove Material:** Butyl rubber, BR; Rubber gloves; Nitrile rubber, NBR; Neoprene gloves;

**Eye Protection:** Safety Glasses

**Sodium Bicarbonate:**

**Respiratory Protection:** Dust mask required if total dust level exceeds 10 mg/m<sup>3</sup>.

**Protection Gloves:** General purpose for handling dry products. Impervious gloves when working with solutions.

**Eye Protection:** Safety glasses when handling bulk material or when dusts are generated.

**Other Protective Clothing or Equipment:** Full cover clothing. Apron where splashing may occur when working with solutions.

**Cornstarch(Non-genetically modified):**

**Exposure Limits:**

Chemical Name	Source	Type	Exposure Limits	Notes
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Starch, respirable fraction	NIOSH	TWA	5 mg/m <sup>3</sup>	-
Starch, total dust	NIOSH	TWA	10 mg/m <sup>3</sup>	-
Starch	ACGIH	TWA	10 mg/m <sup>3</sup>	Dermatitis, ling
Starch, respirable fraction	OSHA	TWA	5 mg/m <sup>3</sup>	-
Starch, total dust	OSHA	TWA	15 mg/m <sup>3</sup>	-
Starch, respirable fraction	Cal OSHA	TWA	5 mg/m <sup>3</sup>	-
Starch, total dust	Cal OSHA	TWA	10 mg/m <sup>3</sup>	-
Starch, respirable fraction	Oregon Table Z-1	TWA	5 mg/m <sup>3</sup>	-
Starch, total dust	Oregon Table Z-1	TWA	10 mg/m <sup>3</sup>	-
Starch	Alberta	TWA	10 mg/m <sup>3</sup>	-
Starch, respirable fraction	British Columbia	TWA	3 mg/m <sup>3</sup>	-
Starch, total dust	British Columbia	TWA	10 mg/m <sup>3</sup>	-
Starch, total dust	Ontario	TWA	10 mg/m <sup>3</sup>	-
Starch, total dust	Quebec	TWA	10 mg/m <sup>3</sup>	-

**Engineering Controls:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable), or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA standard 63 FR 1152, January 8, 1998. Respirator type: Dust.

**Eye Protection:** Wear safety glass with side shields (or goggles). Wear a full faced respirator if needed.

**Skin Protection:** Wear suitable protective clothing and footwear appropriate for the risk of exposure.

**Hygiene Measures:** Eye wash, washing facilities

**Monocalcium Phosphate:**

**Eye Protection:** This product does not cause significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact.

**Skin Protection:** Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

**Respiratory Protection:** Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 C.F.R. 1910.134.

**Ventilation:** Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits (see below). The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment.

**Airborne Exposure Limits:**

OSHA and ACGIH have not established specific exposure limits for this material. However, OSHA and ACGIH have established limits for particulates not otherwise classified (PNOC) which are the least stringent exposure limits applicable to dusts.

<u>OSHA PEL</u>	<u>ACGIH TLV</u>
15 mg/m <sup>3</sup> (total dust) 8hr TWA	10mg/m <sup>3</sup> (inhalable) 8hr TWA
5mg/m <sup>3</sup> (respirable) 8hr TWA	3mg/m <sup>3</sup> (respirable) 8hr TWA

**9. Physical and Chemical Properties**

**Sodium Acid Pyrophosphate:**

- Chemical Formula:** Na<sub>2</sub>H<sub>2</sub>P<sub>2</sub>O<sub>7</sub>
- Form:** Powder
- Color:** White
- Odor:** Odorless
- Change in condition**
  - Melting Point** Undetermined
  - Boiling Point** Undetermined
- Flash Point:** N/A
- Flammability:** Product is not flammable
- Danger of Explosion:** Product does not present an explosion hazard.
- Density:** Not determined.

**Bulk Density @ 20 degrees C (68F):** ca. 900 kg/m<sup>3</sup>  
**Solubility in/Miscibility with Water at 20 degrees C (68F):** 130g/l  
**pH-value (10g/l) at 20 degrees C (68F):** 4.2

**Sodium Bicarbonate:**

**Appearance:** white crystalline powder  
**Odor:** None  
**Physical state:** Solid  
**pH as is:** Not applicable  
**pH (1% SOLN. w/v):** 8.2  
**Vapor Pressure:** Not applicable  
**Vapor Density:** Not applicable  
**Boiling Point:** Not applicable  
**Freezing/Melting Point:** Not applicable  
**Solubility in Water:** 8.6g/100ml @20 degrees C  
**Bulk Density (g/cc):** 62 lb/Ft<sup>3</sup>  
**% Volatile:** Not applicable  
**Volatile Organic Compounds:** Not applicable  
**Molecular weight:** 84.02

**Cornstarch(Non-genetically modified):**

**Color:** White to slightly yellow  
**Odor:** Starch-like  
**Physical State:** Solid (powder)  
**pH:** No data available  
**Melting Point:** Decomposes  
**Freezing Point:** Not applicable  
**Boiling Point:** Decomposes  
**Flash Point:** Noncombustible solid – May form explosive mixture with air  
**Evaporation Rate:** Not applicable  
**Flammability:** Non-combustible solid- May form explosive mixture with air.  
**Vapor Pressure:** Not applicable  
**Vapor Density (Air=1):** Not applicable  
**Specific Gravity:** Not applicable  
**Bulk Density:** 0.40 – 0.90 kg/l  
**Viscosity (25 degrees C)** Not applicable  
**Viscosity (40 degrees C)** Not applicable  
**Solubility in Water:** In soluble, although pregelatinized products will absorb water  
**Percent Volatile by**  
**Weight (%) Moisture:** No data available  
**Partition Coefficient**

(n-Octanol/water): No data available  
Decomposition Temperature: No data available

**Monocalcium Phosphate:**

Chemical Formula:  $\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot \text{H}_2\text{O}$   
Appearance: white crystals  
Odor: white crystals  
Melting Point: Decomposes @ 200 degrees C (392 degrees F)  
Solubility in Water: 18gm/l @30 degrees C (86 degrees F)  
Neutralizing Value: 81

**10. Stability and Reactivity**

**Sodium Acid Pyrophosphate:**

Thermal Decomposition/conditions to be avoided: No decomposition if used according to specifications.

Dangerous Reactions: No dangerous reactions known.

Dangerous products of decomposition: Not known.

**Sodium Bicarbonate:**

Chemical Stability: Stable

Conditions to Avoid: Temperature above 65 degrees C (150 degrees F).

Incompatibility with Other Materials: Reacts with acids to yield carbon dioxide. Also may yield free caustic in presence of lime dust (CaO) and moisture (i.e., water, perspiration).

Hazardous Decomposition Products: Heating above 100 degrees C may cause dangerous levels of carbon dioxide gas to be present in confined spaces. Yields sodium oxide if exposed to temperatures above 850 degrees C. Avoid inhalation, eye and skin contact with sodium oxide.

**Cornstarch(Non-genetically modified):**

Stability: Explosive Properties: Starches may form explosive mixtures in certain conditions. Starches are a class St1 dust at normal moisture level.

Lower Explosion Limit: 60g/m<sup>3</sup>

Minimum Ignition Energy (MIE): >30mJ at normal moisture level.

Pmax: 9.5 bar

Kst: 170 bar. m/s

Layer Ignition Temperature: >450 degrees C  
 Autoignition temperature: 170 degrees C: Above this temperature, starch will self heat.  
 Conditions to Avoid: High humidity, ignition sources, excessive dusting  
 Incompatible Materials: Oxidizers, acids, iodine, alkalis  
 Hazardous Decomposition Products: Carbon oxides  
 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

**Monocalcium Phosphate:**

Stability: Product is stable under normal conditions of storage and handling.  
 Materials to Avoid: none known  
 Hazardous Decomposition Products: none known  
 Hazardous Polymerization: will not occur

**11. Toxicological Information**

**Sodium Acid Pyrophosphate:**

Acute Toxicity:  
 LD/LC50 values that are relevant for classification: Oral LD50 > 2000mg/kg (rat)  
 Primary irritant effect:  
 Skin: No irritant effect  
 Eyes: No irritant effect  
 Sensitization: No sensitizing effects known.  
 Additional Toxicological Information: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.  
 The substance is not subject to classification.

**Sodium Bicarbonate:**

Eye Effects: The material was minimally irritating to unwashed eyes and practically non-irritating to washed eyes (rabbits)  
 Skin Effects: Not a skin irritant or dermally toxic. Not a contact sensitizer.  
 Acute oral effects: Acute Oral-rat LD50 = 7.3 g/kg.  
 Acute inhalation: LC 50 (rat) > 4.74 mg/l

**Cornstarch(Non-genetically modified):**

Corn starch is considered nontoxic.

Chemical Name	Test Results
Corn Starch	Skin Irritation (human): 300 µg/3D-1: Mild irritant effect
Corn Starch	Intraperitoneal LD50 (mouse): 6600mg/kg

Carcinogens: None

**Monocalcium Phosphate:**

The dry powder may cause foreign body irritation in some individuals. Prolonged contact with the dry powder may cause drying or chapping of the skin. Excessive inhalation of dust may be annoying and can mechanically impede respiration.

Data on single-dose (acute) animal studies with this material are given below:

Oral – rat LD50: 7,100 mg/kg: practically nontoxic

Dermal – rabbit LD50: >7,940mg/kg

Eye Irritation – rabbit: 9.3/110.00: slightly irritating

Skin Irritation – rabbit: 0.0/8.0: nonirritating

No adverse genetic changes were reported in standard tests using material and yeast cells. No birth defects were reported in mice, rats or rabbits given this material during pregnancy.

**12. Ecological Information**

**Sodium Acid Pyrophosphate:**

Ecotoxicological effects: Aquatic Toxicity: Oral LC0/48h > 1500mg/l (golden orfe)

General notes: Do not allow product to reach ground water, water course or sewage system.

**Sodium Bicarbonate:**

Aquatic Toxicity:

Daphnides: EC50=4100mg/l.  
Bluegill: LC50=7100mg/l.  
Rainbow Trout: LC50=7700 mg/l

Persistence: This product is not expected to persist in the environment.

Bioaccumulation: This product is not expected to bioaccumulate.

**Cornstarch(Non-genetically modified):**

There is no data on the ecotoxicity of this product. Starch is a carbohydrate polymer in many types of plants. It is not expected to pose an ecological risk.

**Monocalcium Phosphate:**

Clabber Girl's supplier for MCP has not conducted biodegradation studies with this product since when dissolved/hydrolyzed in water it yields completely mineralized materials.

**13. Disposal Considerations****Sodium Acid Pyrophosphate:**

Must not be disposed of together with household garbage. Do not allow product to reach sewer system.

Disposal must be made according to official regulations.

**Sodium Bicarbonate:**

Bury in a secured landfill in accordance with all local, state, and federal environmental regulations. Empty containers may be incinerated or disregarded as general trash.

**Cornstarch(Non-genetically modified):**

Dispose of waste and residues in accordance with local authority requirements. Incinerate or landfill.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

**Monocalcium Phosphate:**

This material when discarded is not a hazardous waste as that term is defined by the Resource conservation and Recovery Act (RCRA). 40 CFR 261. Dry material may be landfilled or recycled in accordance with local, state and federal regulations. Consult your attorney or appropriate regulatory officials for information on such disposal.

**14. Transportation Information:****Sodium Acid Pyrophosphate:**

Land Transport ADR/RID (cross-border): ADR/RID class: No dangerous good.

Maritime transport IMDG: IMDG class: No dangerous good.

Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class: No dangerous good.

**Sodium Bicarbonate:**

D.O.T. Shipping Name: Not regulated  
Technical Shipping Name: Sodium Bicarbonate  
D.O.T. Hazard Class: None  
U.N./N.A. Number: None  
Hazardous Substance/RQ: None  
D.O.T. Label: None

**Cornstarch**(Non-genetically modified):

DOT: Not Regulated  
TDG: Not Regulated  
IATA: Not Regulated  
IMDG: Not Regulated

**Monocalcium Phosphate:**

The data provided in this section is form information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

This product is not hazardous under the applicable DOT, ICAO/IATA, or IMDG regulations.

## 15. Regulatory Information

**Sodium Acid Pyrophosphate:**

**SARA**

Section 355 (extremely hazardous substances): Substance is not listed.

Section 313 (Specific toxic chemical listings): Substance is not listed.

TSCA (Toxic Substances Control Act): Substance is listed.

**Proposition 65**

Chemicals known to cause cancer: Substance is not listed.

Chemicals known to cause reproductive toxicity for females: Substance is not listed.

Chemicals known to cause reproductive toxicity in males: Substance is not listed.

Chemicals known to cause development toxicity: Substance is not listed.

**Carcinogenicity categories**

EPA (Environmental Protection Agency): Substance is not listed.

IARC (International Agency for Research on Cancer): Substance is not listed.

NTP (National Toxicology Program): Substance is not listed.

TLV (Threshold Limit Value established by ACGIH): Substance is not listed.

MAK (German Maximum Workplace Concentration): Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health): Substance is not listed.

OSHA-Ca (Occupational Safety and Health Administration): Substance is not listed.

**Product related hazard information:**

The substance is not subject classification according to the sources of literature known to us.

Observe the general safety regulations when handling chemicals.

**National regulations:**

**Water hazard class: Water hazard class I (Self-assessment): Slightly hazardous for water.**

**Sodium Bicarbonate:**

**Clean Air Act Section 611: Material neither contains nor is it manufactured with ozone depleting substances (ODS).**

**Federal Water Pollution Control Act (40 CFR 401.15): Material contains no intentionally added or detectable (contaminant) levels of EPA priority toxic pollutants.**

**Food and Drug Administration: Generally Recognized as Safe (GRAS) direct food additive (21 CFR 184.1736).**

**US Department of Agriculture: List of Proprietary Substances – Permitted Use Codes 3A, J1, A1, G1, and L1**

**CERCLA Reportable Quantity: None**

**OSHA: Not hazardous under 29 CFR 1910.1200**

**RCRA: Not a hazardous material or a hazardous waste by listing or characteristic**

**SARA Title III:**

**Section 302, Extremely Hazardous Substances: None**

**Section 311/312, Hazardous Categories: Non-hazardous**

**Section 313, Toxic Chemicals: None**

**Sodium bicarbonate is reported in the EPA TSCA Inventory List**

**Contains no VOCs.**

**National Stocking Number: 6810002646618. Contract No. DLA 40086C1831**

**NSF Standard 60: Corrosion and Scale Control in Potable Water. Max use 200 mg/1.**

**Canada-DSL**

**European Inventory (EINECS): 205-633-8**

**Japanese Inventory (MITI): 1-164**

**Australian Inventory (AICS): Carbonic acid, monosodium salt.**

**Cornstarch(Non-genetically modified):**

**Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.**

**WHMIS Classification: Noncontrolled**

**Mexican Dangerous Statement: None**

**Inventory Status:**

**This product is listed on the following inventories: TSCA, DSL. This product is exempt by the FDA and Canadian Food and Drug Act.**

**TSCA: This substance exempt from reporting under the Inventory Update Rule.**

**Categorization of Existing Substances on DSL: Starch**

**Substance Category: UBIO: UVCBs: Biological**

**Meets CEPA criteria: No**

**Meets human health criteria: No**

**Human health priority: Low**

**Meets environmental criteria: no**

**Persistent: Uncertain**

**Bioaccumulative: Uncertain**

**Inherently toxic to aquatic organisms: No**

#### **US regulations**

**CERCLA Hazardous Substance List (40 CFR 302.4): none**

#### **SARA Title III**

**Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None**

**Section 311/312 (40 CFR 370):**

**Acute (Immediate): X Chronic (Delayed): Fire: Reactive: Pressure Generating:**

**Section 313 Toxic Release Inventory (40 CFR 372): None**

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40CFR 68.130): None**

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None**

#### **Drug Enforcement Act**

**Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f) (2))): Not applicable**

**FDA Status: Everything Added to Food in the United States (EAFUS) Database: Starch unmodified ; FDA/CFSAN Database of Indirect Food Additives: PAFA Document Number 2801; Corn starch is considered GRAS (Generally Recognized as Safe).**

**Section 403(i) of the Federal Drug and Cosmetic Act, and Section 4 (a)(1) of the Fair Packaging and Labeling Act, the term "starch" is considered the common or usual name for starch made from corn: alternatively, the name "corn starch" may be used. 21 CFR 172.878**

**Canada FDR: B.13.011 Corn starch**

**Kosher status: Kosher certified**

**Halal Status: Halal certified**

#### **State Regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): None**

Illinois Toxic Substances Disclosures to Employees Act: Starch  
Indiana Occupational Health and Safety Standards; Air Contaminants: Starch, respirable fraction; starch, total dust.  
Kentucky Occupational Health and Safety Standards; Air Contaminants: Starch, respirable fraction; starch, total dust  
Massachusetts Right-to-Know List: Starch dust  
Minnesota Hazardous Substance List: Starch  
New Jersey Right-to Know List: None  
North Carolina Exposure Limits for Air Contaminants: Starch, respirable fraction; starch, total dust  
Pennsylvania Right-to Know List: Starch  
Rhode Island Right-to Know List: Starch

**Monocalcium Phosphate:**

**TSCA Inventory:**

Since hydrate materials could not be reported on the Inventory of Chemical Substances published by the U.S. Environmental Protection Agency (EPA) under authority of the Toxic Substances Control Act (TSCA), phosphoric acid calcium salt monohydrate was reported as anhydrous with CAS No. 7758-23-8

**SARA Hazard Notification**

Hazard Categories Under Title III Rules (40 CFR 370): not applicable  
Section 302 Extremely Hazardous Substances: not applicable  
Section 313 Toxic Chemical(s): not applicable

**CERCLA Reportable Quantity: Not applicable**

**16. Other Information**

**Format Revision June 1, 2009 – Clabber Girl Research and Development**

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