

DATE UPDATED: MARCH 2004

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SECTION I. PRODUCT AND COMPANY INFORMATION  
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PRODUCT NAME: Calcium Iodate  
MANUFACTURER'S NAME: AJAY NORTH AMERICA, LLC.  
ADDRESS: 1400 Industry RD  
Powder Springs, GA 30127-0127  
FOR INFORMATION CALL: 770-943-6202  
EMERGENCY PHONE #: CHEMTREC 800-424-9300

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SECTION II. COMPOSITION, INFORMATION ON INGREDIENTS  
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Chemical Name: Iodic Acid, Calcium Salt  
Common Name: Calcium Iodate Anhydrous or Monohydrate  
CAS Number: 7789-80-2  
Chemical Formula:  $\text{Ca}(\text{IO}_3)_2$ ;  $\text{Ca}(\text{IO}_3)_2 \cdot \text{H}_2\text{O}$   
Product Use: Nutritional source of iodine in animal feeds  
(anhydrous, monohydrate); dough conditioner  
(monohydrate).

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SECTION III. HAZARDOUS IDENTIFICATION  
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Oxidizer may ignite organic and other easily oxidizable materials.

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SECTION IV. FIRST AID PROCEDURES  
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Eye Contact: Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids until no evidence of chemical remains, (15-20 min.). Get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Wash affected area with mild detergent and large amounts of water until no evidence of chemicals remain. Get medical attention if needed.

Inhalation: Remove from exposure area to fresh air immediately. If breathing has stopped, give artificial respiration. Keep affected persons warm and at rest. Get medical attention.

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Ingestion: If victim is conscious, immediately give 2 to 4 glasses of water and induce vomiting by touching fingers to back of throat. Get medical attention immediately.  
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SECTION V. FIRE FIGHTING MEASURES

Flash Point Deg. F.: N/A  
Flammable Limits: Lel - N/A Uel - N/A  
Method Used: N/A

Extinguishing Media: Dry chemical, carbon dioxide, or alcohol foam.

Special Fire Fighting Procedures:  
No acute hazard; avoid breathing vapors or dust. Wear self-contained positive pressure breathing apparatus.

Unusual Fire and Explosion Hazards:  
Oxidizer - may ignite organic and other easily oxidizable materials.

Hazardous Decomposition Products:  
Toxic fumes of iodine, hydrogen iodide and oxides of calcium.

NFPA RATINGS (Estimated) (SCALE 0=4): Health=2 Flammability=0  
Reactivity=0 Special Hazard=OX (Oxidizing agent)

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SECTION VI. ACCIDENTAL RELEASE MEASURES

Response to Small Spills: Sweep up and collect in plastic or glass container. Close and label "oxidizer."

Response to Large Spills:  
Prevent dispersion of dust into atmosphere. Sweep up and collect in suitable (e.g. glass or plastic) container and label "oxidizer." Keep from sewer or water sources.  
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SECTION VII. HANDLING AND STORAGE

Handling: Avoid generating dust. Use in a well ventilated area. Avoid contact with eyes, skin and clothing. Also avoid ingestion and inhalation. Wash thoroughly after handling.

Storage: Do not store near combustible or reducing material. Keep away from sources of ignition such as open flames, excessive heat, and sparks. Store in tightly closed containers in a cool dry place.

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SECTION VIII. EXPOSURE CONTROLS, PERSONAL PROTECTION  
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Chemical Name	Common Name	CAS NO.	%	OSHA PEL	ACGIH TLV-TWA
Iodic Acid, Calcium Salt	Calcium Iodate	7789-80-2	97.5+	NE	NE

Respiratory Protection: High efficiency particulate respirator necessary. Respiratory protection programs must meet the requirements of 29CFR 1910.132.

For Hands, Body: Wear appropriate protective gloves and garments to prevent bodily contact.

For Eyes: Wear splash-proof or dust resistant safety goggles to prevent contact with this substance.

Ventilation: Provide local exhaust or general dilution ventilation.

Engineering Controls: Safety shower and eyewash should be in the facility.

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SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES  
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Physical State: Solid  
 Appearance: White to creamy crystalline powder  
 Odor: Possible slight acrid  
 pH @ 25 C: 4 to 12 (5% Slurry)  
 Vapor Pressure (mm Hg): N/A  
 Vapor Density (AIR=1): N/A  
 Evaporation Rate (Ether=1): N/A  
 Boiling Point, (760mm Hg.): N/A  
 Melting Point: Decomposes 540 deg. C.  
 Decomposition Temperature: 540 deg. C.  
 Solubility in Water: 0.10 g/100 ml @ 10 deg.C.  
 Specific Gravity (Water=1): 4.5  
 % Non-Volatile: 100  
 Molecular Formula: Ca(IO3)2 or Ca(IO3)2.H2O  
 Molecular Weight: 389.89, 407.90

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SECTION X. STABILITY AND REACTIVITY  
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Stability: Stable.

Conditions to Avoid: Heat above 540 deg. C. (decomposes).

Incompatibility: (Materials to Avoid) - Combustibles and reducing agents. Aluminum, copper, arsenic, phosphorous, sulfur or carbon mixed with iodates may explode on heating.

Can Hazardous Polymerization Occur: Not known to occur.

Hazardous Decomposition Products and Conditions:

Thermal decomposition products are toxic fumes of iodine, hydrogen iodide and oxides of calcium.

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SECTION XI. TOXICOLOGICAL INFORMATION  
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Oral Toxicity:

Not established. Calcium iodate is considered to have a relatively low level of toxicity. However, there is insufficient data available to fully characterize the toxicity of this product. Substance may be absorbed by inhalation or ingestion.

Dermal Toxicity: Acute exposure: No data available.  
Chronic exposure: No data available.

Inhalation: Acute exposure: May cause mucous membrane irritation.  
Chronic exposure: No data available.

Chronic Toxicity: No data available.

Mutagenesis: No data available.

Effects of Overexposure:

Ingestion: No effects have been reported in humans. However, animal experiments have shown iodate salts to cause nephrotoxic and hemolytic effects with the ingestion of large doses.

Skin Contact: No effects have been reported in humans.

Eye Contact: May cause irritation, redness and swelling. Other data not available.

Inhalation: May cause lung congestion. Other data not available.

Acute Systemic Effects: No data available.

Chronic Systemic Effects: No data available.

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SECTION XII. ECOLOGICAL INFORMATION  
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No information available

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SECTION XIII. DISPOSAL CONSIDERATIONS  
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Reportable Quantity: Data not available.  
Waste Classification: Hazardous (oxidizer).  
Disposal Methods: Recycle or ship to approved chemical waste facility in accordance with all federal, state, or local regulations.

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SECTION XIV. TRANSPORT INFORMATION  
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DOT Shipping Name: Oxidizing solid, n.o.s. (Calcium Iodate),  
5.1, UN1479, II  
DOT Placard: Oxidizer

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SECTION XV. REGULATORY STATUS  
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CALCIUM IODATE (CAS No. 7789-80-2): Not listed for SARA Section 302 EHS RQ: Reportable Quantity of Extremely Hazardous Substance, listed at 40 CFR 355

CALCIUM IODATE (CAS No. 7789-80-2): Not listed for SARA Section 302 EHS TPQ: Threshold Planning Quantity of Extremely Hazardous Substance. An asterisk (\*) following a Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micrometers, the Threshold Planning Quantity = 10,000 LB.

CALCIUM IODATE (CAS No. 7789-80-2): Not listed for SARA Section 313 Chemicals: Toxic Substances subject to annual release reporting requirements listed at 40 CFR 372.65.

CALCIUM IODATE (CAS No. 7789-80-2): Not listed for CERCLA Sec.103: Comprehensive Environmental Response, Compensation and Liability Act (Superfund). Releases to air, land or water of these hazardous substances which exceed the Reportable Quantity (RQ) must be reported to the National Response Center, (800-424-8802); Listed at 40 CFR 302.4.

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CALCIUM IODATE (CAS No. 7789-80-2): Not listed for RCRA: Resource Conservation and Reclamation Act. Commercial chemical product wastes designated as acute hazards and toxic under 40 CFR 261.33.

CALCIUM IODATE (CAS No. 7789-80-2): Listed for TSCA, Flag XU. TSCA: Toxic Substances Control Act. Requirement to submit a premanufacturing notice before commencing to manufacture or import a new substance. Flag XU means a substance is exempt from reporting under the Inventory Update Rule.

CALCIUM IODATE (CAS No. 7789-80-2): Not listed for CWA. Clean Water Act for Hazardous Substances which requires reporting for releases. This product is not listed as a Priority Pollutant under CWA.

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The information included herein is believed to be accurate and represents the best information currently available to us. However, we make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine suitability of this information for their particular use.