



### 3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Calcium 3-oxido-5-oxo-4-propionylcyclohex-3-enecarboxylate	127277-53-6	27.5
Other Ingredients, including Calcium silicate	1344-95-2	72.5

### 4. FIRST AID MEASURES

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

### 5. FIRE FIGHTING MEASURES

**Flash Point:** Not applicable

**Autoignition Temperature:** Not applicable

**Flammability Limits:** Not applicable

**Extinguishing Media:** Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

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

**Unusual Fire and Explosion Hazards:** If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

**Hazardous Decomposition Materials (Under Fire Conditions):** May produce oxides of carbon, hydrogen, nitrogen and sulfur.

**National Fire Protection Association (NFPA) Hazard Rating:**

**Rating for this product: Health: 1    Flammability: 1    Reactivity: 0**

Hazards Scale: 0 = Minimal    1 = Slight    2 = Moderate    3 = Serious    4 = Severe

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

**Methods for Containment:** Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

**Methods for Cleanup and Disposal:** Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

**Other Information:** Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

**7. HANDLING AND STORAGE**

**Handling:**

Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Users should wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Storage:**

Store in a cool, dry place. Do not remove the product from the container except for immediate use. Do not contaminate water, food or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Controls:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

**Personal Protective Equipment:**

**Eye/Face Protection:** To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

**Skin Protection:** To avoid contact with skin wear long-sleeved shirt and long pants, shoes plus socks, chemical resistant gloves made of any waterproof material of any waterproof material such as polyethylene or polyvinyl chloride. When mixing, loading, or cleaning equipment a chemical resistant apron must be worn. An emergency shower or water supply should be readily accessible to the work area.

**Respiratory Protection:** Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

**General Hygiene Considerations:** Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

**Exposure Guidelines:**

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Prohexidione Calcium	NE	NE	NE	NE	
Calcium Silicate	5 (resp. dust); 15 (total dust)		10 (total dust)		mg/m <sup>3</sup>

NE = Not Established

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance and Odor:** Tan odorless solid granules.

**Boiling Point:** Not applicable

**Density:** 0.622 kg/L

**Evaporation Rate:** Not applicable

**Freezing Point:** Not applicable

**pH:** 6.2 – 7.2

**Solubility in Water:** Dispersible

**Specific Gravity:** Not determined

**Vapor Density:** Not applicable

**Vapor Pressure:** Negligible

**Viscosity:** Not determined

**Note:** Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

**10. STABILITY AND REACTIVITY**

**Chemical Stability:** This material is stable under normal handling and storage conditions.  
**Conditions to Avoid:** All sources of ignition. Do not store near heat or flame. Avoid extreme temperatures.  
**Incompatible Materials:** Strong oxidizing agent.  
**Hazardous Decomposition Products:** Under fire conditions may produce oxides of carbon, hydrogen, nitrogen and sulfur.  
**Hazardous Reactions:** Hazardous polymerization will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Toxicological Data:**  
 Data from laboratory studies on this product are summarized below:

- Oral (Acute) LD50, Rat:** > 5,000 mg/kg
- Dermal (Acute) LD50, Rat:** > 2,000 mg/kg
- Inhalation (acute), Rat:** > 5.7 mg/L (LC50 rat 4 hour)
- Skin Irritation, Rabbit:** Not an irritant
- Eye Irritation, Rabbit:** Moderately irritating
- Dermal Sensitizer, Guinea Pig:** Not a sensitizer.

**Oncogenicity:** In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.  
**Developmental:** No indications of a developmental toxic/teratogenic effect were seen in animal studies.  
**Reproductive:** The results of animal studies gave no indication of a fertility impairing effect.  
**Mutagenicity:** No mutagenic effect was found in various tests with microorganisms and mammals.

**Assessment Carcinogenicity:** None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:**  
 Data based on prohexidione calcium technical:

96-hour LC <sub>50</sub> Rainbow Trout:	>100 mg/L	Bobwhite Quail Oral LD <sub>50</sub>	> 2,000 mg/kg
96-hour LC <sub>50</sub> Blue Gill	>100 mg/L	Bobwhite Quail Oral LD <sub>50</sub>	>5,000 ppm
48-hour LC <sub>50</sub> Daphnia magna	>100 mg/L	Mallard Duck 8-day Dietary LC <sub>50</sub> :	>5,000 ppm
120-hour EC <sub>50</sub> Green Algae:	> 100 mg/L	Honey Bee LD <sub>50</sub>	>100 µg/bee
EC <sub>50</sub> Green Algae	> 1.2 mg/L		

The ecological data given are those of the active ingredient. Prohexadione calcium is toxic to aquatic plants. Do not release untreated into natural waters.

**Environmental Fate:**  
 Prohexadione calcium is toxic to aquatic plants. Do not release untreated into natural waters.

**13. DISPOSAL CONSIDERATIONS****Waste Disposal Method:**

Wastes resulting from this product may be disposed of at an approved waste disposal facility. Excess pesticide, spray mixture or rinsate must be handled and disposed of in accordance with federal, state or local procedures. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Handling and Disposal:**

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available..

**14. TRANSPORTATION INFORMATION**

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

**DOT**

Non Regulated

**IMDG**

Non Regulated

**IATA**

Non Regulated

**15. REGULATORY INFORMATION****U.S. Federal Regulations:**

**TSCA Inventory:** This product is exempted from TSCA because it is solely for FIFRA regulated use.

**SARA Hazard Notification/Reporting:****Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):**

Immediate

**Section 313 Toxic Chemical(s):**

None

**Reportable Quantity (RQ) under U.S. CERCLA:**

None

**RCRA Waste Code:**

None

**State Information:**

Other state regulations may apply. Check individual state requirements.

**California Proposition 65:** Not Listed

**16. OTHER INFORMATION**

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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