

Section 1. Product and Company Identification

**Product Name** Crotonic Acid  
**CAS Number** 3724-65-0

**Parchem - fine & specialty chemicals**  
**415 Huguenot Street**  
**New Rochelle, NY 10801**  
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EMERGENCY RESPONSE NUMBER  
CHEMTEL  
Toll Free US & Canada: 1 (800) 255-3924  
All other Origins: 1 (813) 248-0585  
Collect Calls Accepted

Section 2. Hazards Identification

**Classification of the substance or mixture**

**GHS Classification**

**Serious eye damage:** Category 1

**GHS Label Elements**

**Pictograms:**



**Signal word:** DANGER

**Hazard and precautionary statements**

**Hazard statements**

H318 Causes serious eye damage.

**Precautionary statements**

**Prevention**

P280 Wear protective gloves/ 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.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

**Emergency Overview**

**Appearance:** Crystalline

**Color:** Colorless to yellowish

**Odor:** Slightly pungent



### Potential Health Effects

**Aggravated Medical Condition:** None known.

**Symptoms of Overexposure:** Serious eye damage

### Section 3. Composition / Information on Ingredients

**Common Name** Crotonic Acid

**CAS Number** 3724-65-0

### Section 4. First Aid Measures

**General advice:** Remove soiled or soaked clothing immediately. If someone exposed to the product feels unwell, contact a doctor and show this safety data sheet. Adhere to personal protective measures when giving first aid.

**Inhalation:** Remove the casualty into fresh air and keep him calm. Call in a physician immediately and show him the Safety Data Sheet.

**Skin contact:** In case of contact with skin wash off immediately with polyethylene glycol 400, then with plenty of water. If polyethylene glycol is not available, rinse off with plenty of water. Consult a doctor if skin irritation persists.

**Eye contact:** Rinse immediately with gently running water for 15 minutes, maintaining eyelids open. Consult at once an ophthalmologist or a physician.

**Ingestion:** Do not induce vomiting. Call in a physician immediately and show him the Safety Data Sheet. Let plenty of water be drunk in small gulps.

**Most important symptoms and effects, both acute and delayed:** Serious eye damage

**Notes to physician:** Treat symptomatically.

### Section 5. Firefighting Measures

**Suitable extinguishing media:** Water spray; Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media:** Foam

**Specific hazards during firefighting:** In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO)

**Specific extinguishing methods:** Standard procedure for chemical fires.

**Further information:** Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

**Special protective equipment for firefighters:** In case of fire, wear respiratory protection

### Section 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Wear personal protective equipment. Unprotected persons must be kept away.

**Environmental precautions:** Do not allow to enter drains or waterways

**Methods and materials for containment and cleaning up:** Take up mechanically. When picked up, treat material as prescribed under heading "Disposal".

#### Section 7. Handling and Storage

##### Handling

**Advice on safe handling:** Keep the formation and deposition of dust to a minimum.

Provide good ventilation of working area (local exhaust ventilation if necessary).

**Advice on protection against fire and explosion:** Organic products which are intentionally or unintentionally in powdered form have, in principle, the possibility of creating a dust explosion hazard. Avoid impact, friction and accumulation of electrostatic charge. Keep away from sources of ignition - refrain from smoking.

##### Storage

**Requirements for storage areas and containers:** Keep only in the original container

**Further information on storage conditions:** Keep container tightly closed in a cool, well-ventilated place

**Advice on common storage:** Do not store or transport together with foodstuffs

#### Section 8. Exposure Controls / Personal Protection

**Components with workplace control parameters:** Contains no substances with occupational exposure limit values.

**Engineering measures:** See section 7; no measures in addition to the ones mentioned are necessary.

##### Personal protective equipment

**Respiratory protection:** Dust mask

##### Hand protection

**Material:** Rubber gloves

**Rate of permeability:** 480 min

**Glove thickness:** 0.6 mm

**Remarks:** These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.

**Eye protection:** Safety glasses/face shield

**Skin and body protection:** Protective clothing

**Protective measures:** Do not inhale dust. Avoid contact with eyes and skin

**Hygiene measures:** Do not eat or drink during work time.

Section 9. Physical and Chemical Properties

**Appearance:** Crystalline  
**Color:** Colorless to yellowish  
**Odor:** Slightly pungent  
**pH:** approx. 3, Concentration: 10 g/l (20°C)  
**Melting point:** > 69.5 °C  
**Boiling point:** 185 - 199.5°C  
**Flash point:** approx. 89°C  
**Vapor pressure:** 0.25 mbar (20°C)  
**Bulk density:** 543 kg/m<sup>3</sup>

**Solubility(ies)**

**Water Solubility:** 94 g/l (25°C)  
**pH:** 2.3  
**Partition coefficient (n-Octanol/Water):** log Pow: 0.85  
**Ignition temperature:** > 400°C  
**Thermal decomposition:** from 210°C (3 K/min)  
**Conductivity:** Not determined

Section 10. Stability and Reactivity

**Reactivity:** No dangerous reaction known under conditions of normal use.  
**Chemical stability:** No decomposition if stored and applied as directed.  
**Possibility of hazardous reactions:** Reactions with strong oxidizing agents. Reactions with peroxides. Reactions with alkalis.  
**Conditions to avoid:** Keep away from heat and sources of ignition.  
**Incompatible materials:** Strong oxidizing agents; Bases  
**Hazardous decomposition products:** When handled and stored appropriately, no dangerous decomposition products are known

Section 11. Toxicological Information

**Acute toxicity**

**Acute oral toxicity:** LD50 rat (female): 2,610 mg/kg  
**Acute inhalation toxicity:** Not available  
**Acute dermal toxicity:** LD50 Dermal Rat, male and female: > 2,000 mg/kg

**Skin corrosion/irritation**

**Species:** Rabbit  
**Result:** Slight irritant effect - does not require labelling

**Serious eye damage/eye irritation**

**Species:** Rabbit

**Result:** Risk of serious damage to eyes.

**Respiratory or skin sensitization**

**Test Method:** Local lymph node assay (LLNA)

**Exposure routes:** Dermal

**Species:** Mouse

**Result:** Does not cause skin sensitization.

**Germ cell mutagenicity:** Not mutagenic in Ames Test

**Carcinogenicity:** Not determined

**Reproductive toxicity:** Not determined

**STOT – single exposure:** No data available

**STOT – repeated exposure:** No data available

**Aspiration toxicity:** No data available

Section 12. Ecological Information

**Ecotoxicity**

**Toxicity to fish:** LC50 (Pimephales promelas (fathead minnow)): 31 mg/l

**Exposure time:** 96 h

**Test Method:** Flow-through test

**Method:** OECD Test Guideline 203

**Toxicity to daphnia and other aquatic invertebrates**

**EC50 (Daphnia magna (Water flea)):** 150 mg/l

**Exposure time:** 48 h

**Test Method:** flow-through test

**Method:** OECD Test Guideline 202

**Toxicity to algae**

**EC50 (Pseudokirchneriella subcapitata (algae)):** 57.5 mg/l

**Exposure time:** 72 h

**Test Type:** Growth inhibition

**Method:** OECD Test Guideline 201

**Persistence and degradability**

**Biodegradability:** Biodegradation: > 95 %

**Testing period:** 10 d

**Exposure time:** 10 d

**Method:** OECD 302 B

**Concentration:** 50 mg/l

**Result:** Readily biodegradable (according to OECD criteria)

**Biodegradation:** 99%



**Testing period:** 28 d  
**Exposure time:** 28 d  
**Method:** OECD 301 F  
**GLP:** yes

**Bioaccumulative potential**

**Bioaccumulation:** No bioaccumulation is to be expected ( $\log P_{ow} \leq 4$ ).

**Partition coefficient (n-Octanol/Water):**  $\log P_{ow}$ : 0.85

**Method:** (Q)SAR EPIWIN 4.00

**Mobility in soil**

**Distribution among environmental compartments:** No data available

**Other Adverse Effects**

**Results of PBT and vPvB assessment:** This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

**Additional ecological information:** Avoid release into soil, rivers or drains.

Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

**International Regulation**

**IATA-DGR**

**UN/ID No.:** UN 2823

**Proper shipping name:** Crotonic acid, solid

**Class:** 8

**Packing group:** III

**Labels:** Corrosives

**Packing instruction (cargo aircraft):** 864

**Packing instruction (passenger aircraft):** 860

**IMDG-Code**

**UN number:** UN 2823

**Proper shipping name:** CROTONIC ACID, SOLID

**Class:** 8

**Packing group:** III

**Labels:** 8

**EmS Code:** F-A, S-B

**Marine pollutant:** no



**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable for product as supplied.

**National Regulations**

**49 CFR**

**UN/ID/NA number:** UN 2823

**Proper shipping name:** Crotonic acid, solid

**Class:** 8

**Packing group:** III

**Labels:** Corrosive

**ERG Code:** 153

**Marine pollutant:** No

**Remarks:** None known.

Section 15. Regulatory Information

**OSHA Hazards:** CAUSES EYE BURNS

**California Prop 65:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:** TSCA

**Inventories:** AICS (Australia), DSL (Canada), IECSC (China), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**HMIS Rating**

**Health:** 3

**Flammability:** 2

**Reactivity:** 0

**NFPA Rating**

**Health:** 3

**Flammability:** 2

**Reactivity:** 0

Section 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.

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