

## 2-Chloroacetophenone

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 2-Chloroacetophenone

Company :	For Chemical Emergencies:
Charkit Chemical Corporation	CHEMTREC
32 Haviland Street, Unit 1	(USA) 800-424-9300
Norwalk, CT 06854	(INTL) +1 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
532-27-4	2-Chloroacetophenone	99	208-531-1

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white to yellow crystalline powder.

**Danger!** Toxic if inhaled. Toxic if swallowed. Causes burns by all exposure routes.

**Target Organs:** Respiratory system, eyes, skin.

#### Potential Health Effects

**Eye:** Causes eye burns. Lachrymator (substance which increases the flow of tears).

**Skin:** Causes skin burns. Causes redness and pain. May be harmful if absorbed through the skin.

**Ingestion:** Causes gastrointestinal tract burns. Toxic if swallowed.

**Inhalation:** Causes chemical burns to the respiratory tract. Toxic if inhaled.

**Chronic:** No information found. 2-Chloroacetophenone has been shown to be a co-carcinogen in mice dosed dermally.

## Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use carbon dioxide or dry chemical.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** N/A

**Upper:** N/A

**NFPA Rating:** (estimated) Health: 3; Flammability: 1; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

**Handling:** Do not let this chemical enter the environment. Minimize dust generation and accumulation. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Store protected from moisture.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Chloroacetophenone	0.05 ppm TWA	0.05 ppm TWA; 0.3 mg/m <sup>3</sup> TWA 15 mg/m <sup>3</sup> IDLH	0.05 ppm TWA; 0.3 mg/m <sup>3</sup> TWA

**OSHA Vacated PELs:** 2-Chloroacetophenone: 0.05 ppm TWA; 0.3 mg/m<sup>3</sup> TWA

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** white to yellow crystalline powder

**Odor:** floral-like - irritating odor - sharp odor

**pH:** Not applicable.

**Vapor Pressure:** 0.0054 mm Hg @ 20 deg C

**Vapor Density:** 5.3 (air=1)

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 244-245 deg C @ 760 mm Hg

**Freezing/Melting Point:** 52-53 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Insoluble.

**Specific Gravity/Density:**1.324 g/cm<sup>3</sup>

**Molecular Formula:**C<sub>8</sub>H<sub>7</sub>ClO

**Molecular Weight:**154.60

## Section 10 - Stability and Reactivity

**Chemical Stability:** Moisture sensitive.

**Conditions to Avoid:** Incompatible materials, dust generation, exposure to moist air or water.

**Incompatibilities with Other Materials:** Bases, alcohols, amines.

**Hazardous Decomposition Products:** Hydrogen chloride, carbon monoxide, carbon dioxide.

**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 532-27-4: AM6300000

**LD50/LC50:**

CAS# 532-27-4:

Dermal, guinea pig: LD50 = >1 gm/kg;  
Draize test, rabbit, eye: 1 mg Mild;  
Draize test, rabbit, eye: 3 mg Severe;  
Draize test, rabbit, eye: 1%;  
Draize test, rabbit, skin: 5 mg/24H Mild;  
Inhalation, mouse: LC50 = 59 mg/m<sup>3</sup>;  
Oral, mouse: LD50 = 139 mg/kg;  
Oral, rabbit: LD50 = 118 mg/kg;  
Oral, rat: LD50 = 50 mg/kg;

There is LCLo human data in RTECS.

**Carcinogenicity:**

CAS# 532-27-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** Tumorigenic effects have been reported in experimental animals.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** Mutagenic effects have occurred in experimental animals.

**Neurotoxicity:** No information available.

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.

**Environmental:** Terrestrial: Moderate to high mobility in soil. Aquatic: slowly volatilizes into atmosphere. Atmospheric: Half-life 9.2 days. No bioconcentration and little evidence of biodegradation.

**Physical:** No information available.

**Other:** Do not empty into drains.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	CHLOROACETOPHENONE LIQUID FORBIDDEN FOR AIR TRANSPORT.	CHLOROACETOPHENONE
<b>Hazard Class:</b>	6.1	6.1
<b>UN Number:</b>	UN1697	UN1697
<b>Packing Group:</b>	II	II

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 532-27-4 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

CAS# 532-27-4: 100 lb final RQ; 45.4 kg final RQ

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**SARA Codes**

CAS # 532-27-4: immediate, delayed.

**Section 313**

This material contains 2-Chloroacetophenone (CAS# 532-27-4, 99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR

**Clean Air Act:**

CAS# 532-27-4 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 532-27-4 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

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**Risk Phrases:**

R 23/25 Toxic by inhalation and if swallowed.

R 34 Causes burns.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**WGK (Water Danger/Protection)**

CAS# 532-27-4: No information available.

**Canada - DSL/NDSL**

CAS# 532-27-4 is listed on Canada's NDSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D1B, E.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 532-27-4 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

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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