

Common Name: **alpha-CHLOROACETOPHENONE**

Synonyms: CN; Chemical Mace; Tear Gas

CAS No: 532-27-4

 Molecular Formula: C₈H₇ClO

RTK Substance No: 0048

Description: Colorless, white or gray, crystalline solid with an irritating floral odor

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 1 - Fire 0 - Reactivity DOT#: UN 1697 ERG Guide #: 153 Hazard Class: 6.1 (Poison)	COMBUSTIBLE SOLID Use dry chemical, CO ₂ , water spray or foam as extinguishing agents. Water or foam may cause frothing. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Hydrogen Chloride</i> . Use water spray to keep fire-exposed containers cool.	alpha-Chloroacetophenone in contact with WATER or MOIST AIR may form toxic gases such as <i>Hydrogen Chloride</i> . alpha-Chloroacetophenone is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); ALDEHYDES; NITRIC ACID; and PERCHLORIC ACID.

SPILL/LEAKS
Isolation Distance:

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Moisten spilled material first or use a HEPA-filter vacuum for clean-up and deposit into sealed containers.

PHYSICAL PROPERTIES

Odor Threshold:	0.035 ppm (0.1 to 0.15 mg/m ³)
Flash Point:	244°F (118°C)
Vapor Density:	5.2 (air = 1)
Vapor Pressure:	0.005 mm Hg at 68°F (20°C)
Specific Gravity:	1.3 (water = 1)
Water Solubility:	Very slightly soluble
Boiling Point:	471° to 473°F (244° to 245°C)
Ionization Potential:	9.4
Molecular Weight:	155

EXPOSURE LIMITS
OSHA: 0.3 mg/m³, 8-hr TWA

NIOSH: 0.3 mg/m³, 10-hr TWA

ACGIH: 0.3 mg/m³, 8-hr TWA

IDLH: 15 mg/m³
PROTECTIVE EQUIPMENT

Gloves:	Silver Shield®/4H® (>4-hr breakthrough for <i>Aromatic Ketones</i>)
Coveralls:	DuPont Tychem® Responder® (>8-hr breakthrough)
Respirator:	<3 mg/m ³ -full facepiece APR with Organic vapor filters and N100 prefilter >3 mg/m ³ -Supplied air

HEALTH EFFECTS

Eyes:	Severe irritation and burns with redness, blurred vision, pain and tearing
Skin:	Severe Irritation and burns
Inhalation:	Nose, throat and lung irritation with coughing and severe shortness of breath (pulmonary edema)

FIRST AID AND DECONTAMINATION

Remove	the person from exposure.
Flush	eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention immediately.
Quickly	remove contaminated clothing and wash contaminated skin with large amounts of soap and water. Seek medical attention.
Begin	artificial respiration if breathing has stopped and CPR if necessary.
Transfer	promptly to a medical facility.
Medical	observation is recommended as symptoms may be delayed.