

Common Name: **DIMETHYLCARBAMOYL CHLORIDE**

Synonyms: DMCC; Chloroformic Acid Dimethylamide

CAS No: 79-44-7

Molecular Formula: C₃H₆ClNO

RTK Substance No: 0746

Description: Clear, colorless liquid with an unpleasant odor

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 2 - Fire 1 - Reactivity DOT#: UN 2262 ERG Guide #: 156 Hazard Class: 8 (Corrosive)	<p>Dimethylcarbamoyl Chloride is a COMBUSTIBLE LIQUID.</p> <p>Use dry chemical, CO₂, alcohol-resistant foam or other foam extinguishing agents.</p> <p>DO NOT USE WATER.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Hydrogen Chloride</i> and <i>Nitrogen Oxides</i>.</p> <p>CONTAINERS MAY EXPLODE IN FIRE.</p> <p>Use water spray only to keep fire-exposed containers cool as water will decompose Dimethylcarbamoyl Chloride to form toxic <i>Hydrogen Chloride</i> and <i>Dimethylamine</i>.</p>	<p>Dimethylcarbamoyl Chloride will react with WATER, STEAM and MOISTURE to produce toxic <i>Hydrogen Chloride</i> and <i>Dimethylamine</i>.</p> <p>Dimethylcarbamoyl Chloride reacts vigorously or explosively if mixed with DIISOPROPYL ETHER or other ETHERS in the presence of small amounts of METAL SALTS.</p> <p>Dimethylcarbamoyl Chloride is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); ALCOHOLS; STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE); and AMINES.</p>

SPILL/LEAKS

Isolation Distance:

Small Spill: 60 meters (200 feet)

Large Spill: 270 meters (900 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers.

DO NOT USE WATER OR WET METHOD.

DO NOT wash into sewer.

PHYSICAL PROPERTIES

Odor Threshold:	Unpleasant odor
Flash Point:	155°F (68°C)
Vapor Density:	3.7 (air = 1)
Vapor Pressure:	2.5 mm Hg at 77°F (25°C)
Specific Gravity:	1.2 (water = 1)
Water Solubility:	Reactive/Decomposes
Boiling Point:	329° to 333°F (165° to 167°C)
Melting Point:	-27°F (-33°C)
Molecular Weight:	107.6

EXPOSURE LIMITS

OSHA: None

NIOSH: Lowest feasible concentration

ACGIH: 0.005 ppm, 8-hr TWA

IDLH: None

PROTECTIVE EQUIPMENT

Gloves:	Silver Shield®/4H®
Coveralls:	DuPont Tychem® CSM, Responder®, and TK (for <i>known carcinogens</i>)
Respirator:	>0.005 ppm - Supplied air

HEALTH EFFECTS

Eyes:	Irritation and burns
Skin:	Irritation and burns
Inhalation:	Nose, throat and lung irritation with coughing, wheezing and shortness of breath
	Headache, nausea and vomiting
Chronic:	Cancer (nose and skin) in animals

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.