

Common Name: **CALCIUM NITRATE**

Synonyms: Calcium Saltpeter; Lime Nitrate; Nitrocalcite

CAS No: 10124-37-5

Molecular Formula: $\text{Ca}(\text{NO}_3)_2$

RTK Substance No: 0324

Description: White to gray, odorless, crystalline or granular solid

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p>2 - Health</p> <p>0 - Fire</p> <p>3 - Reactivity</p> <p>DOT#: UN 1454</p> <p>ERG Guide #: 140</p> <p>Hazard Class: 5.1 (Oxidizer)</p>	<p>Calcium Nitrate is not combustible, but it is a STRONG OXIDIZER that enhances the combustion of other substances.</p> <p>Use water in flooding quantities or extinguish fire using an agent suitable for type of surrounding fire.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Nitrogen Oxides</i>.</p> <p>Use water spray to keep fire-exposed containers cool.</p> <p>Calcium Nitrate may ignite combustibles (wood, paper and oil).</p>	<p>Mixtures of Calcium Nitrate with ALKYL ESTERS; PHOSPHORUS; TIN CHLORIDE; and REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES) may result in fires and explosions.</p> <p>Calcium Nitrate reacts with WATER to release heat.</p> <p>Calcium Nitrate is not compatible with STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); METAL SALTS; and COMBUSTIBLES.</p>

SPILL/LEAKS

Isolation Distance:

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Collect powdered material in the most convenient and safe manner and place into sealed containers for disposal.

DO NOT wash into sewer.

PHYSICAL PROPERTIES

Odor Threshold:	Odorless
Flash Point:	Nonflammable
Specific Gravity:	2.5 (water = 1)
Water Solubility:	Soluble
Melting Point:	1,042°F (561°C)
Molecular Weight:	164.1

EXPOSURE LIMITS

The Protective Action Criteria values are:

PAC-1 = 0.91 mg/m³

PAC-2 = 10 mg/m³

PAC-3 = 60 mg/m³

PROTECTIVE EQUIPMENT

Gloves:	Nitrile and Natural Rubber
Coveralls:	DuPont Tyvek®
Respirator:	>0.91 mg/m ³ - SCBA

HEALTH EFFECTS

Eyes:	Irritation and burns
Skin:	Irritation and burns
Inhalation:	Nose, throat and lung irritation with coughing, wheezing and shortness of breath
	Headache, dizziness, nausea and vomiting

FIRST AID AND DECONTAMINATION

Remove the person from exposure.

Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer promptly to a medical facility.