

Common Name: **AMMONIUM CARBONATE**

Synonyms: Diammonium Carbonate; Hartshorn

CAS No: 506-87-6

Molecular Formula: $(\text{NH}_4)_2\text{CO}_3$

RTK Substance No: 0092

Description: Colorless or white, crystalline powder with a strong *Ammonia* odor

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p>2 - Health</p> <p>0 - Fire</p> <p>1 - Reactivity</p> <p>DOT#: UN 3077</p> <p>ERG Guide #: 171</p> <p>Hazard Class: 9 (Environmentally Hazardous Material)</p>	<p>Extinguish fire using an agent suitable for type of surrounding fire. Ammonium Carbonate itself does not burn.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Nitrogen Oxides</i> and <i>Ammonia</i>.</p> <p>Use water spray to knock down vapors.</p> <p>Sufficient amounts of <i>Ammonia gas</i> may be generated in a fire to become an explosion hazard.</p>	<p>Ammonium Carbonate is not compatible with STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); ACID SALTS; AMINES and other ALKALOIDS; ALUM; CALOMEL (MERCURY CHLORIDE); SODIUM HYPOCHLORITE; IRON SALTS; and ZINC SALTS.</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.

Cover with plastic sheeting.

Ammonium Carbonate is hazardous to the environment

PHYSICAL PROPERTIES

Odor Threshold: *Ammonia* odor

Flash Point: Nonflammable

Specific Gravity: 1.5 (water = 1)

Water Solubility: Soluble

Boiling Point: Decomposes

Melting Point: 136.4°F (58°C)

Molecular Weight: 157.1

EXPOSURE LIMITS

NIOSH: 25 ppm, 10-hr TWA; 35 ppm, STEL (as *Ammonia*)

The Protective Action Criteria values are:

PAC-1 = 0.31 mg/m³

PAC-2 = 3.5 mg/m³

PAC-3 = 21 mg/m³

PROTECTIVE EQUIPMENT

Gloves: Nitrile and Natural Rubber

Coveralls: Tyvek®

Respirator: >0.31 mg/m³ - SCBA
>25 ppm (as *Ammonia*) - SCBA

HEALTH EFFECTS

Eyes: Irritation

Skin: Irritation

Inhalation: Nose, throat and lung irritation with coughing and shortness of breath.

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.