Right to Know Hazardous Substance Fact Sheet

Emergency Responders Quick Reference

Common Name: **ZINC NITRATE**

Synonyms: Zinc Dinitrate
CAS No: 7779-88-6
Molecular Formula: $Zn(NO_3)_2$
RTK Substance No: 2036
Description: Colorless or white, odorless, crystalline solid or flake

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
2 - Health **0 - Fire** **0 - Reactivity** **DOT#:** UN 1514 **ERG Guide #:** 140 **Hazard Class:** 5.1 (Oxidizer)	**Zinc Nitrate** is not combustible, but it is a STRONG OXIDIZER that enhances the combustion of other substances. Use water only. DO NOT USE CHEMICAL or CO_2 as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE, including *Nitrogen Oxides* and *Zinc Oxide fumes*. Use water spray to keep fire-exposed containers cool. **Zinc Nitrate** may ignite combustibles (wood, paper and oil).	**Zinc Nitrate** may react violently with COMBUSTIBLES; REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES); CARBONS; COPPER; METAL SULFIDES; PHOSPHORUS; SULFUR; and ALKYL ESTERS. **Zinc Nitrate** is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); CYANIDES; METAL POWDERS; AMINES; METAL SALTS (such as TIN CHLORIDE); and ACETIC ANHYDRIDES. Keep away from all COMBUSTIBLES and ORGANICS.

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.
Zinc Nitrate is harmful to aquatic life in low concentrations.

PHYSICAL PROPERTIES

Odor Threshold:	Odorless
Flash Point:	Noncombustible
Vapor Pressure:	60 mm Hg at 1,292°F (700°C)
Specific Gravity:	2.07 (water = 1)
Water Solubility:	Soluble
Boiling Point:	221°F (105°C)
Melting Point:	97° to 108.5°F (36° to 42.5°C)
Molecular Weight:	189.39

EXPOSURE LIMITS

No occupational exposure limits have been established for **Zinc Nitrate**.

The Protective Action Criteria values are:
PAC-1 = 15 mg/m^3
PAC-2 = 125 mg/m^3
PAC-3 = 500 mg/m^3

PROTECTIVE EQUIPMENT

Gloves:	Nitrile and Natural Rubber
Coveralls:	Tyvek®
Respirator:	>15 mg/m^3 - Full facepiece APR with *High efficiency filters* >125 mg/m^3 - SCBA

HEALTH EFFECTS

Eyes:	Irritation and burns
Skin:	Irritation, burns and rash
Inhalation:	Nose and throat irritation with coughing and wheezing Headache, dizziness, fatigue and blue color to the skin and lips (methemoglobinemia)

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. Seek medical attention.
Quickly remove contaminated clothing and wash contaminated skin with large amounts of water. Seek medical attention.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer promptly to a medical facility.