NJ Health New Jersey Department of Health

Right to Know Hazardous Substance Fact Sheet

Emergency Responders Quick Reference

Common Name: **ALDRIN**

Synonyms: HHDN; Octalene
CAS No: 309-00-2
Molecular Formula: $C_{12}H_8Cl_6$
RTK Substance No: 0033

Description: White to brown, crystalline solid, or a brown liquid, with a mild chemical odor

HAZARD DATA

Hazard Rating

3 - Health
0 (Solid) - Fire
3 (Liquid)- Fire
0 - Reactivity

DOT#:
UN 2761 (Solid)
UN 2762 (Liquid)

ERG Guide #:
151 (Solid)
131 (Liquid)

Hazard Class:
6.1 (Poison) (Solid)
3 (Flammable) (Liquid)

Firefighting

Aldrin does not burn, however, it is often dissolved in a liquid carrier which may be flammable or combustible.

Use dry chemical, CO_2, water spray, alcohol-resistant foam or other foam as extinguishing agents.

POISONOUS GASES ARE PRODUCED IN FIRE, including *Hydrogen Chloride*.

Use water spray to keep fire-exposed containers cool.

Reactivity

Aldrin is not compatible with STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); ACID CATALYSTS; and PHENOL.

Aldrin may attack METALS in the presence of WATER.

SPILL/LEAKS

Isolation Distance:

Spill (solid): 25 meters (75 feet)

Spill (liquid): 50 meters (150 feet)

Fire: 800 meters (1/2 mile)

Absorb **Aldrin** in *liquid solution* in vermiculite, dry sand, earth, or a similar material and place into sealed containers for disposal.

Moisten *solid* **Aldrin** first or use a HEPA-filter vacuum for clean-up and place into sealed containers for disposal.

DO NOT wash into sewer.

Keep **Aldrin** in *liquid solution* out of confined spaces, such as sewers, because of the possibility of an explosion.

Use only non-sparking tools and equipment, especially when opening and closing containers of **Aldrin** in *liquid solution*.

Aldrin is very toxic to aquatic organisms and the environment. It bioaccumulates and has long-term effects.

PHYSICAL PROPERTIES

Odor Threshold:	Mild chemical odor
Vapor Pressure:	8×10^{-5} mm Hg at 68°F (20°C)
Specific Gravity:	1.6 (solid) (water = 1)
Water Solubility:	Very slightly soluble
Boiling Point:	Decomposes
Melting Point:	219°F (104°C)
Molecular Weight:	365

EXPOSURE LIMITS

OSHA: 0.25 mg/m^3, 8-hr TWA
NIOSH: 0.25 mg/m^3, 10-hr TWA
ACGIH: 0.05 mg/m^3, 8-hr TWA
IDLH: 25 mg/m^3

The Protective Action Criteria values are:
PAC-1 = 0.25 mg/m^3 PAC-2 = 10 mg/m^3
PAC-3 = 25 mg/m^3

PROTECTIVE EQUIPMENT

Gloves: Silver Shield®/4H®, Viton and Barrier® (>4-hr breakthrough for *Hydrocarbons*, *aliphatic*, *unsaturated*)

Coveralls: Tychem® BR, Responder®, and TK; Trellchem® HPS and VPS (>8-hr breakthrough for *Hydrocarbons*, *aliphatic*, *unsaturated*)

Respirator: SCBA

HEALTH EFFECTS

Eyes: Irritation

Skin: Irritation

Inhalation: Headache, dizziness, nausea and vomiting, convulsions and even death

Chronic: Cancer (liver) in animals

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 soap and water.

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

Transfer promptly to a medical facility.