

Common Name: **DIAZINON**

Synonyms: Dimpylate; Basudin®; Spectracide®

CAS No: 333-41-5

Molecular Formula: $C_{12}H_{21}N_2O_3PS$

RTK Substance No: 0618

Description: Colorless, nearly odorless liquid *Organophosphate* pesticide when pure; the technical product is pale to dark brown with a faint odor; and the commercial products may be liquids, solids or powders

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 1 - Fire 0 - Reactivity DOT#: UN 2783 ERG Guide #: 152 Hazard Class: 6.1	Diazinon 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 or foam as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Nitrogen Oxides</i> , <i>Sulfur Oxides</i> and <i>Phosphorus Oxides</i> . Use water spray to keep fire-exposed containers cool.	Diazinon may react with REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES) to form highly toxic and flammable <i>Phosphine gas</i> . Diazinon is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE); COPPER COMPOUNDS; and WATER.

SPILL/LEAKS

Isolation Distance:

Spill (liquid): 50 meters (150 feet)

Spill (solid): 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in dry sand, earth, or a noncombustible material and place into sealed containers for disposal. Collect powdered material in the most convenient and safe manner and place into sealed containers for disposal.

Keep *flammable solutions* of **Diazinon** out of confined spaces, such as sewers, because of the possibility of an explosion.

DO NOT wash into sewer.

PHYSICAL PROPERTIES

Flash Point:	82 ° to 180 °F (28 ° to 82 °C) (for Diazinon in solution, pure Diazinon is difficult to burn)
Auto Ignition Temp:	>752 °F (>400 °C)
Vapor Pressure:	0.0001 mm Hg at 68 °F (20 °C) (<i>Solid</i>)
Specific Gravity:	1.1 (water = 1)
Water Solubility:	Very slightly soluble
Boiling Point:	>248 °F (>120 °C) (Decomposes)
Molecular Weight:	304.4

EXPOSURE LIMITS

NIOSH: 0.1 mg/m³, 10-hr TWA

ACGIH: 0.01 mg/m³, 8-hr TWA

PROTECTIVE EQUIPMENT

Gloves:	Nitrile and Neoprene (>8-hr breakthrough for <i>Organophosphorus compounds</i>)
Coveralls:	Tychem® CSM (>8-hr breakthrough)
Respirator:	SCBA

HEALTH EFFECTS

Eyes:	Irritation
Skin:	Irritation
Inhalation:	Headache, sweating, nausea and vomiting, loss of coordination, and death (<i>Organophosphate poisoning</i>)

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