





DIAZIDIP 16.2% EC

(Diazinon 162 g/l EC) Insecticide for control of animal ectoparasites and of household and storage pests

INTRODUCTION

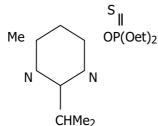
DIAZINON 16.2% EC is an organophosphorus, pyrimidine, non-systemic insecticide abdacaricide with contact, stomach and respiratory action. Cholinesterase inhibitor.

DIAZINON 16.2% EC is an emulsifiable concentrate for the prevention and treatment of ectoparasitic infestations in cattle, sheep, horses, pigs and other domestic animals. They are effective at very low doses for control of ticks, fleas, lice and flies. The product can also be used in the Public Health Sector for the control of household and storage pests.

PHYSICAL AND CHEMICAL PROPERTIES OF THE TECHNICAL GRADE

Chemical name: O, O-diethyl O-2-isopropyl-6-methylpyrimidin-4-yl phosphorotioate (IUPAC) O, O-diethyl O-(6-methyl-2-(1-methylethyl)-4-pyrimidinyl) phosphorothioate (CA)

Common name: Diazinon Chemical structure :



Empirical formula : $C_{12}H_{21}N_2O_3PS$

Chemical family : Organophosphorus insecticide

Molecular weight : 304.3

Physical state : Clear colourless liquid (oil)

Specific gravity : 1,116 - 1,118 at 20°C

Boiling point : 83 - 84°C at 0.0002 mmHq

Vapour pressure : 0.097 mPa at 20°C

Solubility : In water at 20°C: 40 mg/l. Completely miscible with common organic solvents,

e.g. ethers, alcohols, toluene, hexane, cyclohexanone, dichloromethane, acetone,

petroleum oils.

Stability : Susceptible to oxidation above 100°C. Stable in neutral media, but slowly hydro-

lyzed in alkaline media, and more rapidly in acidic media. Decomposes above 120°C.

FORMULATION CHARACTERISTICS

Type of formulation : Emulsifiable concentrate

Contents : 162 g/l Diazinon
Purity of technical grade: min. 95%
Appearance : Light red liquid
Density : 0.922 +/- 0.003
Flash point : approx. +50°C

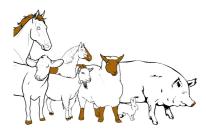
Stability : No significant change in the physico-chemical characteristics after accelerated test

 $(14 \text{ days at } +54^{\circ}\text{C } +/- 1^{\circ}\text{C})$

RECOMMENDATIONS FOR USE

Veterinary use: Prevention and treatment of ecto-parasitic infestations in cattle, sheep, horses, pigs and domestic animals. Diazinon 162 g/I EC is effective at low doses for the control of thicks, fleas, lice and flies.









Dosage : Add 100 ml to 100 - 200 l of water (0.05 - 0.1%) to obtain a ready for use emulsion. Apply preferably by hand spraying, washing or dipping.

Public Health Sector: For the control of Mosquitoes, Spider, Black carpet beetle, Cockroaches, Biting midges, Centipedes, Larder beetle, Millipedes, Ants, Crickets, Pillbugs and sawbugs, Cigarette beetle, Flies, Saw-toothed grain beetle, Broad-nosed weevils, Indian-meal moth, Fleas, Rice weevil.

Dosage : Spray under sinks, refrigerator, cracks in walls and floor, sewage drains and other places where cockroaches, ants and bugs can find to hide._Rate of application: 3% = 300 ml Diazinon 16.2% EC per 10 liter water.

Compatibilty:

Compatible with many other pesticides, but incompatible with copper-containing compounds.

TOXICOLOGY AND ENVIRONMENTAL EFFECTS

Acute oral Toxicity:

LD50 rat (male) : 280 mg a.i./kg
LD50 rat (female) : 240 - 480 mg a.i./kg
LD50 mice : 77 - 122 mg a.i./kg
LD50 rabbits : 143 mg a.i./kg
LD50 guinea pigs : 320 mg a.i./kg
LD50chickens : 408 mg a.i./kg

Acute dermal Toxicity:

LD50 rabbits (male) : 650 mg a.i./kg LD50 rabbits (female) : 540 mg a.i./kg LD50 rat (male) : 900 mg a.i./kg LD50 rat (female) : 455 mg a.i./kg LD50 guinea pigs : 632 mg a.i./kg

Chronic Toxicity:

Rats : in a 2 year feeding study with rats fed up to 0.1 mg/kg/day, no chronic toxicity symptoms appeared.

Dogs : 0.2 mg/kg/day showed no toxic effects.

Monkeys : 0.05 mg/kg/day showed no toxic effects.

Man : 0.02 mg/kg/day showed no toxic effects.

Subcutaneous:

LD50 mice : 55 mg/kg

CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY, REPRODUCTION HAZARD

Non-carcinogenic, non-teratogenic, no reproduction hazard but mutagenic.

Sensitization: Guinea pig : non-sensitizer. **Skin irritation:** Rabbits : mildly irritating.

Eye irritation: Non irritating.

Inhalation toxicity:

LC50 rats : 60 min. exposure: in excess of 23 mg/liter of air.

LC50 mice : 630 mg/kg

Acceptable daily intake: Man: 0.002 mg/kg body weight.

Wild life toxicity:

Birds: LD50 young mallards : 3.5 mg/kg LD50 young pheasants : 4.3 mg/kg

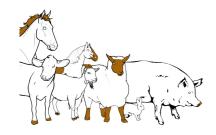
Fish: LD50 (24h) bluegil : 0.052 ppm (24°C)

LC50 (24h) rainbow trout : 0.380 ppm (55°F)

LC50 (24h) harlequin fish : 1.45 ppm LC50 (24h) carp : 3.11 ppm

Bees: Highly toxic to bees









HANDLING PRECAUTIONS

Product may be fatal if swallowed. May be absorbed through the skin. Keep out of reach of children and domestic animals. Do not store near food or feeding stuff. Avoid inhaling, swallowing and contact with skin and eyes. In case of contacting eyes or skin, wash off with water and soap. Wear protective clothing, rubber gloves and respirator if one is to higher concentrations of this material during use. Do not eat, drink or smoke when handling the product. Empty containers should be crushed and buried below top soil. Care should be taken to avoid contamination of water sources.

SYMPTOMS OF TOXICITY

Sweating, headache, nausea, blurred vision, cramps, diarrhea.

FIRST AID

If ingested : Induce vomiting. Seek medical advice.

If on skin : Remove contaminated clothing. Wash affected area with soap and water. If in eyes : Was with plenty of clean water for at least 15 minutes and get medical attention.

NOTE TO PHYSICIAN

Diazinon is a cholinesterase inhibitor and Atropine is the emergency antidote.

Use 2 mg every 15-30 minutes if necessary.

DIAZIDIP

Diazinon 16.2% Emulsifiable Insecticide DIP

For treatment and prevention of external parasites of domestic animals such as ticks, lice, mites, fleas and for control of flies.

Code Nº AD21

Formula:

Active ingredient per ml: Diazinon 162 mg

Indications and use:

Diazidip is used for treatment and prevention of external parasites of domestic animals such as ticks, lice, mites, fleas and for control of flies.

Dosage:

Diazidip is used for hand spraying, wash treatment and for dipping. Add 100 ml to 100 - 200 l water (0.05 - 0.1 %) to obtain a solution ready for use.

Precautions:

IMCO Class 6.1. Harmful if swallowed, in contact with skin or by inhalation. F-Flammable. Flash point: + 42°C Xn - harmful.

- Do not dip thirsty and/or debilitated animals.
- Shearing wounds should not be dipped earlier than 7 days after shearing. Shearing wounds should be first allowed to heal before dipping or spraying.
- Diazidip is completely safe when used according to directions for use but in case of symptoms of poisoning in man, atropin sulfate 1 % solution i.m. is recommended as an anti-dote against the choline esterase inhibition of diazinon.
- Keep out of reach children, keep away from food, feed, drinking water.
- Avoid contact with eyes and mucous membranes. Poisonous to bees and fish.
- Do not drain or pour into pounds, water courses, rivers or sewage systems.

Packing: 1 ltr. aluminium bottles.

Stability: 2 years.

