

 Lokustin, SC

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suspension concentrate

diflubenzuron 125 g/l + imidacloprid 110 g/l

Powerful double-action insecticide to combat locusts, needle- and leaf-eating insects, pests of rapeseed crops.

Advantages:

- Unparalleled insecticide
- Total eradication of locusts
- Pronounced knockdown effect in controlling imago
- Potent effect on larvae of all ages due to a combination of two active ingredients that belong to different chemical classes and have different mode of action
- Shortest possible periods of effect and a long period of protection
- Three applications methods: ground application, aerial application, and aerosol spraying using an aerosol generator

Action

Mode of action

Diflubenzuron has contact and enteric effect, inhibits chitin synthesis, and interferes with the formation of the cuticle during molting. It does not affect imago but interrupts the development of eggs and larvae (ovicidal and larvicidal effect). Larvae die during the next molting when their cuticle is ruptured and the body contents flow out. The ovicidal effect is observed when the eggs are laid on the treated plants.

Imidacloprid has systemic and acute contact enteric effects. It blocks postsynaptic nicotinergeric receptors of the nervous system in insects. As a result, the transmission of signals via the pest central nervous system is inhibited, paralysis and convulsions develop, which causes the death of pests. Active ingredient exhibits high residual activity.

Protective effect period

Not less than 14 days.

Rate of exposure

High rate of toxic effect. The death of imago is observed within 24hours, larvae die within several days

Usage regulations

Crop	Harmful object	Consumption rates of preparation, l/ha	Consumption rates of working liquid, l/ha	Method, time and features of application	Time frames for the start of manual (mechanised) work

Sites invaded with locusts	Locusts	0.08-0.12	200-400	Spraying during mass nymph hatching	-(1)
		0.08-0.12 (A)	25-50 (A)		
		0.08-0.12	2-3	Spraying during mass nymph hatching. Aerosol spraying "GARD"	
Conifers	Needle-eating insects, including Siberian lappet, pine web-spinning sawfly (Acantholyda posticalis), fox-coloured sawfly, and gypsy moth	0.07-0.1	100-200	Spraying when caterpillars and senior and junior larvae develop. Humans are not allowed to arrive at and stay in the treated areas until 20 days after treatment. Picking up wild-growing mushrooms and berries is prohibited in the treatment period.	-(1)
		0.07-0.1(A)	3-25 (A)		
		0.1	1-3	Spraying in the period when caterpillars and junior and senior larvae and imago develop using the "GARD" aerosol adjustable dispersiveness generator. The effective operating range is 140–480m. The period when people may be located in the areas treated with the compound is not earlier than 20 days after treatment. Picking up wild-growing mushrooms and berries is prohibited in the treatment period.	

Foliage species	Leaf-eating and sucking insects, including oak lace bugs, oak flea, and gypsy moth	0.07-0.1	100-200	Spraying when larvae and imago develop. Humans are not allowed to arrive at and stay in the treated areas until 20 days after treatment. Picking up wild-growing mushrooms and berries is prohibited in the treatment period.	-(2)
		0.07-0.1(A)	3-25 (A)		
		0.1	1-3	Spraying when larvae and imago develop using the GUARD aerosol adjustable dispersiveness generator. The effective coverage range is 140 to 480 m. Humans are not allowed to arrive at and stay in the treated areas until 20 days after treatment. Picking up wild-growing mushrooms and berries is prohibited in the treatment period.	-(1)
Spring and winter rapeseed	Crucifer flea beetles	0,2	100-200	Spraying during in the sprouting period upon reaching the economic injury level	30(3)
	Turnip sawfly, rapeseed beetle, cabbage seedpod weevil	0.2	200-400		
	Diamondback moth	0.2-0.4	200-400		

Mustard, redcurrant, thistle (seed crops)	Crucifer flea beetles	0.2	100-200	Spraying during in the sprouting period	-(3)
	Turnip sawfly, rapeseed beetle, cabbage seedpod weevil	0.2	200-400	Spraying during in the growing period	-(3)
	Diamondback moth	0.2-0.4	200-400	Spraying during in the growing period	-(3)

(A) - aerial application

Warning! People may be located in the treated areas not earlier than 20 days after the procedure; the collection of mushrooms and berries during the treatment season is not allowed.

Application technique. Working liquid preparation procedure

Prepare the working solution immediately before use and use it on the day of preparation.

Ground treatment:

Fill the sprayer tank half full with water, start the stirrer, add the full dose of the product, and add the remaining water. Flush the product container with water several times and pour the flushing water into the sprayer tank. Mix the entire volume thoroughly.

For spraying, commercially available ground boom sprayers for the application of insecticides are used.

Aerial treatment:

Prepare the working liquid at a stationary SZC-10 refilling station.

To prepare the working liquid, fill 1/2 of the spray tank with water, add the estimated amount of the product and the remaining water while stirring.

Pour the water from rinsing the container into the sprayer tank.

Pump the prepared working liquid to the filling tanks of APT Temp mobile units and deliver to the treatment site.

Prepare the working solution and refill the sprayer at designated filling places in tanks equipped with mechanical stirrers that are to be deactivated later.

Recommended machine brands: An-2 aircraft and Mi-2 helicopter.

Compatibility with other pesticides

Effective when used alone.

Phytotoxicity

The product is not phytotoxic for plants at the recommended consumption rates. At observance of the procedures for the product application, the cultivated plants show a rather high level of tolerance to the product.

Probability of resistance

Resistance is unlikely when alternating with insecticides from other chemical groups.

General information

Chemical class

benzoylurea derivatives, neonicotinoids

Hazard class

hazard class3, moderately hazardous substance

Shelf life

5 years

Storage temperature

–10°C to +30°C

Packaging

5L container

Registrant

Schelkovo Agrohim, Russia

Manufacturer

Schelkovo Agrohim, Russia