

Health Questions and Answers for

GF-120 NF Naturalyte®

Prepared by the Office of Environmental Health Hazard Assessment, CalEPA



Q: What is GF-120 NF Naturalyte®?

A: GF-120 NF Naturalyte® is an insecticide product that contains the active ingredient Spinosad and a protein bait to attract target insects. Because spinosad is produced by a naturally occurring bacterium, *Saccaropolyspora spinosa*, it is considered a “non-synthetic” or organic pesticide. GF-120 NF Naturalyte® is used by the California Department of Food and Agriculture (CDFA) to control invasive pests in urban areas. When used for this purpose, GF-120 NF Naturalyte® is hand-sprayed onto the foliage of host plants above the ground and out of reach of children and pets. (View the video: *Spinosad: Organic Pest Treatment for Exotic Fruit Flies* at <https://www.cdfa.ca.gov/plant/videos/spinosad/>)

Q: How does the active ingredient, spinosad, work?

A: When insects ingest or come in contact with spinosad, the insect’s nerves become highly excited and over-stimulated. This can lead to death of the insect. Tests indicate that spinosad has little effect on mammalian nervous systems, even at very high doses.

Q: How do federal agencies classify spinosad health effects and risk?

A: Spinosad meets the US Environmental Protection Agency’s requirements for “reduced risk pesticides” because it has been shown to have little impact on human health. The US Department of Agriculture (USDA) allows spinosad for organic use because it is non-synthetic and has been determined to be compatible with organic practices.

Q: What are the human health effects associated with spinosad?

A: Spinosad poses very little health risk to humans when GF-120 NF Naturalyte® is applied as instructed on the label. High doses of spinosad applied to skin show very low toxicity to mammals. Studies show no evidence of mutations, other DNA damage, or cancer. It can cause temporary slight eye and skin irritation when tested at high concentrations. It does not cause skin-sensitization reactions such as allergic contact dermatitis in test animals.

Q: What is known about the inert ingredients in GF-120 NF Naturalyte®?

A: Like all products allowed for organic use, the inerts in GF-120 NF Naturalyte® come from a USDA list of “inerts of minimal concern”. Some of the inert ingredients, when tested at high concentrations on laboratory animals, caused slight skin or eye irritation. None of the inert ingredients showed evidence of causing cancer. Exposure to any of the inert ingredients is expected to be very low.

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Q: What happens to GF-120 NF Naturalyte® after it is applied on plants?

A: Most of the active ingredient, spinosad, remains on the surface of the foliage. A small amount of spinosad may enter the leaves but it is not distributed to other parts of the plant. Applying the insecticide to foliage could also result in spinosad landing on the ground. Spinosad tends to stay in the top soil and is not persistent in the environment. Residues on foliage and on the ground are broken down by sunlight or bacteria within a few days to several weeks.

Q: What actions can people take to reduce their exposures in areas treated with GF-120 NF Naturalyte®?

A: Do not perform yard work or allow children to play near the treated trees or plants immediately after the treatment. Rinse off outdoor play areas after the treatment. Wash skin and clothing if contact occurs. Follow instructions provided by CDFA.

Q: Can I eat fruits and vegetables from plants and trees treated with GF-120 NF Naturalyte®?

A: Yes, produce can be harvested and consumed after GF-120 NF Naturalyte® has dried (after 4 hours). They should be washed before they are eaten or cooked.

Q: What should I do if I feel sick after the application of GF-120 NF Naturalyte®?

A: Call the California Poison Control System hotline at (800) 222-1222 or consult with your physician.

For further information, please contact:

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