

SHIPHOLDS

General Information

GENERAL INFORMATION

QUICKPHLO-R Granules may only be used with the QUICKPHLO-R Phosphine Generator to produce phosphine at the fumigation site. The generator may only be operated by a certified applicator or by a person trained in handling and using fumigants, under his direct supervision and who has been further trained and certified by United Phosphorus, Inc. or its approved representatives.

RESTRICTIONS:

1. Do not sell individual pouches.
2. Do not remove pouches from the storage box until ready for fumigation.
3. Use the entire contents of a pouch. Do not leave any granules inside the pouch after opening.
4. Unreacted and partially spent granules remaining in the generator, may be disposed of according to the instructions in this Manual (Disposal of Spent and Partially Reacted Granules, Section 22).
5. Do not leave individual pouches outside its original storage box for extended period of time.
6. Do not handle the pouches with wet hands.

To undertake safe and effective fumigations, a Fumigation Management Plan (FMP) is to be developed by the certified applicator who is responsible for the entire fumigation process. For further details on FMP refer to Section 19 of the label.

INTRODUCTION

QUICKPHLO-R GRANULES

QUICKPHLO-R Granules must only be used with the QUICKPHLO-R Phosphine Generator and not for use in the manner conventionally employed by aluminum and

magnesium phosphide tablets, pellets and rope fumigants. The granules must not be added directly to raw or any other type of agricultural commodity. QUICKPHLO-R Granules are for the exclusive use in a QUICKPHLO-R Phosphine Generator for generating phosphine gas for fumigation of stored products to control insect and vertebrate pests.

QUICKPHLO-R Granules in combination with QUICKPHLO-R Phosphine Generator, are used to protect stored commodities from damage by insects and for control of rodents and other vertebrate pests. Fumigation of stored products with QUICKPHLO-R Granules in the manner prescribed in the labeling does not contaminate the stored commodity because the granules do not come in direct contact with the stored commodity.

QUICKPHLO-R Granules are acted upon by liquid water to produce phosphine (PH₃) gas.

QUICKPHLO-R Granules contain aluminum phosphide as the active ingredient and will liberate phosphine.

Phosphine gas is highly toxic to insects, vertebrate pests, humans, and other forms of animal life. The phosphine gas will corrode certain metals and may ignite spontaneously in air at concentrations above its lower flammable limit of 1.8% (v/v). These hazards are described in greater detail in the Precautionary Statements section of this Manual.

QUICKPHLO-R Granules are greenish yellow in color and are up to 1.4 mm in size. QUICKPHLO-R Granules are packed in sealed aluminum foil pouches containing 0.125 kg (0.275 lb.), 0.550 kg (1.21 lb.), 2.200 kg (4.85 lb.) or 4.400 kg (9.69 lb.) of product. Each aluminum foil pouch will generate upon contact with water 56 gm, 250 gm, 1,000 gm or 2,000 gm of phosphine, respectively, which equates to almost 1 gram of phosphine for each 2.2 gm of QUICKPHLO-R Granules. The aluminum foil pouches are packed in card board, corrugated boxes and shipped in 3/5 ply corrugated fiberboard cartons.

See label for the recommended number of pouches to generate desired amount of phosphine.

Note:

Package size of granules and amount of phosphine gas generated:

125 g granules generates 56 g of phosphine

550 g granules generates 250 g of phosphine

2.2 kg granules generates 1 kg of phosphine

4.4 kg granules generates 2 kg of phosphine

or

1.0 g of granules generates 0.45 g of phosphine equivalent to 11.3 ppm of phosphine/1,000 cu.ft.

QUICKPHLO-R Granules are packed in sealed aluminum foil pouches and their shelf life is unlimited as long as the packaging remains intact. The aluminum pouches containing QUICKPHLO-R Granules cannot be resealed for future use. Storage and Handling instructions are given in detail in the Storage Instructions and Disposal Instructions sections of the Applicator's Manual. Precautions for and instructions for use of the generator equipment with QUICKPHLO-R Granules are explained in the User's Operating Instruction Manual supplied with the generator equipment.

Limitations, Restrictions, and Exceptions

SHIPHOLDS

When a dosage range is recommended, use the higher rate under conditions of severe infestation, lower temperature and other applicable variables. The listed dosage in the label ranges are based on bulk storage (per 1,000 bushels) or space fumigations (per 1,000 cu. ft.).

ALLOWABLE DOSAGE RANGE FOR FUMIGATION WITH QUICKPHLO-R GRANULES

After determining the quantity of stored commodity or area to be treated, calculate the quantity of QUICKPHLO-R Granules required using the application rate table under Section 7.1. Use an adequate number of pouches (use an entire pouch) as required for the fumigation (Section 3.1). The amount of phosphine to be used and generated is predetermined based on area to be fumigated, type of storage and other variables.

After calculating the amount in grams of granules needed for the size of the structure to be fumigated, determine the package size best suitable for use in the generator. If multiple packages are used, and the phosphine concentration level in the structure has reached adequate levels for control of insect pests, then any excess phosphine or unused granules in the generator can be deactivated inside the generator. Any excess phosphine gas which is generated during this deactivation step is passed through a scrubber containing a special grade activated carbon. No phosphine is released from the unit; only clean air is let off into atmosphere. The above dosages are not to be exceeded. It is important to be aware that a shortened exposure period cannot be fully compensated for with an increased dosage of phosphine.

Somewhat higher dosages, but not exceeding the maximum dosage, are usually recommended under cooler, or where exposure periods are relatively short. However, the major factor in selection of dosage is the ability of the structure to hold phosphine gas during the fumigation. A good illustration of this point is comparison of the low dosages required to treat modern, well-sealed warehouses with the higher doses used for structures that cannot be sealed adequately.

In certain fumigations, proper distribution of lethal concentrations of gas to reach all parts of the structure becomes a very important factor in dosage selection. Use of QUICKPHLO-R Granules can eliminate the problem of non-uniform gas concentrations. Another advantage for using the granules is the ease of use and not having to reenter the treated structure by applicators to apply additional fumigant, as is the case with the metallic phosphides.

Lower doses of Phosphine can be used for fumigation with QUICKPHLO-R Phosphine Generator, since the gas addition and distribution inside the fumigating chamber is quick and continuous unlike the aluminum and magnesium phosphine tablets, pellets and rope formulations.

Method

[Fumigation](#)

Rates

[field rates 0](#)

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Timings

[N. A.](#)