

REQUIREMENTS FOR SPROUT NIPtm APPLICATION

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INTRODUCTION

Sprout Niptm brand potato sprout inhibitor is a special formulation of chlorpropham approved for use as a post-harvest treatment on potatoes to control sprouting.

Sprout Nip prevents potato sprouting by stopping all growth of the potato bud. It works only on the surface of the potato and leaves no taste, odor or unusual color. The active ingredient in Sprout Nip has received a tolerance for post-harvest application on potatoes to inhibit sprouting. The tolerance, established by the Federal Food and Drug Administration, provides for an upper limit of 50 ppm, which is well above the residue found on potatoes properly treated with Sprout Nip.

APPLICATION METHODS

When used as an in-storage treatment, Sprout Nip is applied as a fine, aerosol mist. This mist, or fog, is suspended in the air streams circulating through the stored potatoes. It penetrates into all accessible voids to give the potatoes a uniform application. Treatment should be made after cuts and bruises on the potatoes are thoroughly healed.

For potatoes not treated in storage, a post-storage treatment with Sprout Nip is available using an emulsifiable concentrate formulation. After mixing with water to form an emulsion, it is sprayed on potatoes traveling over dryer rolls as they leave the washing process.

STORAGE CONDITIONS IMPORTANT

Practicing good potato storage management is an essential part of attaining effective sprout control. Storage management applies to before and after the potatoes are in storage. Many of the storage problems are brought in from the potato field.

The following factors are important for post-harvest sprout control:

1. Storage preparation
2. Air dust placement
3. Fan system
4. Humidification and refrigeration
5. Insulation
6. Piling potatoes
7. Precondition or curing.

SPROUT NIP APPLICATION

Sprout Nip gives best results when it is used early. Potatoes should be treated before they become soft and press together to form flat surfaces preventing the chemical from reaching the potato eye. Potatoes which have sprouted and begun to grow should not be treated as the treatment may be incomplete.

After the potatoes have been in storage and cooled to approximately 45^o F, the following procedures are used:

1. Seal storage
2. Provide entry for chemical
3. Introduce Sprout Nip into air system
4. Recycle air
5. Timing length of treatment
6. Storage management procedures after treatment.

SUMMARY

Proper use of a potato sprout inhibitor provides much more than sprout control. Sprouting leads to increased moisture loss and shrinkage may result in pressure bruise and black spot.

A sprout inhibitor can help maintain potato quality in storage, extending the marketing period and control the quality of potatoes as they move through market channels. All of these are important to you as growers, shippers and processors.