

Best Management Practices for the Application of *Thimet*[™] 15-G for Wireworm Control in Potatoes

Thimet 15-G containing the active ingredient phorate is an important management tool to reduce wireworm feeding damage on potato tubers and to reduce wireworm populations present in a field. Potato growers are encouraged to adopt *Best Management Practices* when applying *Thimet* 15-G during planting in 2015 to reduce environmental risk.



What is the regulatory status of *Thimet* 15-G Lock'n Load Soil and Systemic Insecticide in Canada?

The Pest Management Regulatory Agency (PMRA) has concluded that the use of phorate and associated end-use products in accordance with the label does entail an unacceptable risk of harm to the environment. As a result, the PMRA has determined that all uses for phorate are to be phased out.

Can *Thimet* 15-G be used for the 2015 planting season?

Yes. The PMRA has designated the last use of *Thimet* 15-G by growers in Canada as August 1, 2015, after planting has been completed.

For the 2015 use season, potato growers are encouraged to adopt the *Best Management Practices* developed by the Canadian Potato Council for the use of *Thimet* 15-G to minimize the risk to the environment.

What are the environmental risks PMRA has identified associated with *Thimet* 15-G use?

Studies have shown that *Thimet* 15-G could pose a risk to birds, small mammals, fish and aquatic invertebrates such as freshwater shrimp if not applied correctly. *Thimet* 15-G has been demonstrated to be very highly toxic to birds and small mammals on an acute oral basis (i.e. when granules are directly ingested) and highly toxic to birds and very highly toxic to small mammals on a dietary basis over time.

Thimet 15-G is a clay based granule that may be ingested by birds in search of grit/food or by small mammals in search of food.

The PMRA has assessed the risk to birds and mammals based on a 1% estimated surface exposure for in-furrow applications (i.e. 1% of applied granules remain on the soil surface after planting). So eliminating exposure is very important.

What *Best Management Practices* can be adopted to mitigate or reduce the risks identified by PMRA related to *Thimet 15-G* use in 2015?

Reducing the risk to birds and small mammals and other organisms is directly associated with reducing the opportunity for exposure to the product. **KEY TO REDUCING THIS EXPOSURE IS MINIMIZING THE NUMBER OF *THIMET 15-G* GRANULES THAT REMAIN ON THE SOIL SURFACE AFTER APPLICATION AT PLANTING.** The following practices will contribute to minimizing the number of granules remaining on the soil surface following application of *Thimet 15-G*:

- Calibrate the application equipment to ensure that the correct quantity of *Thimet 15-G* is applied in-furrow for the soil type and row width in the production system used.
- Confirm that the *Thimet 15-G* granules are being applied at the required depth in a single row beneath the tubers to maximize efficacy and protection of the daughter tubers and to prevent improper product placement.
- Ensure that soil adequately covers the treated furrow following planting.
- Prevent unintended release of *Thimet 15-G* granules at the row end prior to raising the planter.
- If spills of *Thimet 15-G* occur, immediately remove or bury the spilled granules so that they do not remain on the soil surface.
- Harrow or cultivate the headlands/row ends of fields soon after planting to cover any granules that may be left of the soil surface.



In conclusion

Potato growers are strongly encouraged to be aware of risks to the environment that have been identified when *Thimet 15-G* is applied for wireworm control. Through the adoption of Best Management Practices for the application of *Thimet 15-G* during the 2015 planting season, identified risks to the environment can be greatly reduced and mitigated.