

**Evaluation Report for Category B,
Subcategories: C.2.1 (guarantee), C.2.3 (identity of formulants), C.2.4
(proportion of formulants), B.3.10 (tank mixes), B.3.11 (new pests) and B.3.12
(new hosts) Application**

Application Number: 2005-0607
Application: Evaluation Report for Category B, Subcategories: C.2.1 (guarantee), C.2.3 (identity of formulants), C.2.4 (proportion of formulants), B.3.10 (tank mixes), B.3.11 (new pests) and B.3.12 (new hosts)
Product: Muster Herbicide Toss-N-Go
Registration Number: 23569
Active ingredients (a.i.): contained in product: - ethametsulfuron-methyl at 75%
PMRA Document Number: 1365311

Background

Muster Herbicide Toss-N-Go has been registered since July 12, 1994. Muster Herbicide Toss-N-Go is registered for postemergence use in canola and condiment mustard (Brown and Oriental mustards only) for the control of certain broadleaved weeds. For specific details of uses, application rates and methods, precautions, restrictions and personal protective equipments, refer to the product label.

Purpose of Application

The purpose of this application is to amend the registration of Muster Herbicide Toss-N-Go to include 1) oilseed type oriental mustard, and 2) a tank mixture with Assure II Herbicide (Reg. No. 25462), containing 96 g/L quizalofop-p-ethyl. The tank mixture is proposed for the control of annual and perennial grasses as a postemergence use. The requested rates are 15 g a.i./ha Muster Toss-N-Go alone and 15 g a.i./ha Muster Toss-N-Go + 36.5-72 g a.i./ha Assure II plus a labelled non-ionic surfactant (Ag-Surf, Citowett Plus or Agral 90) in a minimum of 100 L/ha. Condiment type oriental mustard already appears on the Muster Toss-N-Go label. The preharvest interval (PHI) is 60 days.

Chemistry Assessment

Muster Herbicide Toss-N-Go is formulated as a wettable granule containing ethametsulfuron-methyl at a nominal concentration of 75%. This end-use product has a density of 0.74 g/cc and pH of 6.4 - 7.2 (as a 1% slurry). The product contains a list 2 formulant. The chemistry requirements for Muster Herbicide Toss-N-Go are complete.

Health Assessment

A minor formulation change would not significantly alter the acute toxicity potential of the product. No new data were required.

The use on oilseed type oriental mustard should not result in an increase in potential occupational or bystander (re-entry) exposure over registered uses of this active ingredient since the application rate, number of applications, frequency of application and method of application fell within that registered for other labelled oilseeds.

Residue data for ethametsulfuron-methyl in oilseed type oriental mustard were not submitted to support the use expansion of this active on the Muster Herbicide Toss-N-Go label (PCP# 23569). According to the Regulatory proposal (PRO2003-02), existing residue data for canola may be used to support oilseed oriental mustard if the label directions for these two crops are identical and existing residue data on file for rapeseed are adequate to support the proposed use on oilseed oriental mustard. Previously reviewed residue data from field trials conducted in/on canola (rapeseed) and sunflower were reassessed in the framework of this petition. In addition, a processing study in treated rapeseed was also reassessed to determine the potential for concentration of residues of ethametsulfuron-methyl into processed commodities.

The present request is also to add Assure II Herbicide as a tank mix partner to the Muster Herbicide Toss-N-Go label for use on oilseed and condiment type oriental mustard. The proposed tank mix partner, quizalofop-p-ethyl, is registered on oilseed and condiment type oriental mustard at rates equivalent to or lower than the rates on the Assure II Herbicide label.

There is no evidence to suggest interactions and/or synergy between the two tank mix partners (ethametsulfuron-methyl and quizalofop-p-ethyl) within the oilseed crops since they have different modes of action. Accordingly, the disposition, translocation and magnitude of the residues of ethametsulfuron-methyl is not expected to be affected when tank mixed with Assure II Herbicide. No additional dietary risk from ethametsulfuron-methyl is anticipated.

Maximum Residue Limit(s)

Based on the maximum residues observed in other oilseeds treated with ethametsulfuron-methyl, it was determined that no quantifiable residues of ethametsulfuron-methyl is expected in oilseed type oriental mustard as a result of the use of Muster Herbicide Toss-N-Go. Therefore, a MRL is proposed at the limit of quantification (LOQ) of the enforcement method for oilseed matrices: 0.02 ppm. Residues of ethametsulfuron-methyl did not concentrate in any of the canola processed fractions including oil. Residues of ethametsulfuron-methyl in processed commodities are covered under established MRLs for the raw agricultural commodity (RAC).

Table 1. Summary of Field Trial and Processing Data Used to Establish Maximum Residue Limit(s) (MRLs)							
Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)		Experimental Processing Factor	Currently Established MRL	Recom- mended MRL
			Min	Max			
Oilseed type oriental mustard	<u>Canola Residue Data</u> Postemergent foliar broadcast spray/ 15-70	60- 137	<0.0 2	<0.0 2	No concentration of residues observed in oil fractions.	None	0.02 ppm
	<u>Sunflower Residue Data</u> Postemergent foliar broadcast spray/ 22.5	59	<0.0 2	<0.0 2	-		

Environmental Assessment

The proposed inclusion of new host, new tank mix, new pest, new guarantee, new formulant identity and new formulant proportion, do not pose additional risk to the environment. Also, the proposed method and rate of application of the proposed use are identical to the currently registered canola and condiment oriental mustard uses for Muster Toss-N-Go and Assure II Herbicide, and that no additional environmental data are required.

Value Assessment

The data provided for review from a total of 6 trials conducted at different locations in Saskatchewan in 2004 support the addition of oilseed type oriental mustard to the Muster Toss-N-Go label. The data also support the addition of a tank mix of Muster Toss-N-Go + Assure II to oilseed type oriental mustard for the control of labelled weeds.

Due to the known crop safety of Muster Toss-N-Go Herbicide to related crops, including canola, condiment and oilseed oriental mustard, and the known crop safety of Assure II Herbicide to broadleaved crops including canola, the extension of the registration of the tank mix of Muster Toss-N-Go + Assure II to condiment type oriental mustard is also acceptable from an ESAD point of view. Due to a minor use label expansion to expand the use of Muster Toss-N-Go to canola in the Okanagan and Creston Valley areas of British Columbia, the reference to western Canada on the proposed supplemental label is acceptable.

E.I. DuPont Canada also provided notification of a change in guarantee from 75% minimal to 75% nominal, to change the identity of one of the formulants, and to change the proportion of formulants of Muster Toss-N-Go Herbicide. The Formulants Section provided comment on the change in identity of one of the formulants (talc) and indicated the replacements are chemically equivalent to the formulant being replaced. Talc is present as a diluent (or carrier) in the Muster Toss-N-Go Herbicide formulation in a proportion of less than 10%. There is no change in the proportion of active ingredient (66%) proposed therefore ESAD is of the opinion that a change in the identity and proportion of talc used as a diluent of carrier in this formulation would not impact the agronomic performance of Muster Toss-N-Go Herbicide.

Conclusions

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Muster Herbicide Toss-N-Go for the addition of oilseed type oriental mustard, and to include a tank mixture with Assure II Herbicide.

MRLs

Following the review of all available data, an MRL of 0.02 ppm for oilseed type oriental mustard is recommended based on the canola and sunflower residue data. Residues of ethametsulfuron-methyl at the recommended MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

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