Health Canada Santé Canada

Evaluation Report for Category B, Subcategories 3.10, 3.12, 3.4 Application

Application Number: 2021-5974
Application: Changes to Product Labels-Tank Mixes, New Site or Host, Application Method
Product: Tolpyralate 400SC Herbicide
Registration Number: 32901
Active ingredient (a.i.): Tolpyralate
PMRA Document Number : 3421917

Purpose of Application

The purpose of this application was to amend the label of the registered end-use product Tolpyralate 400SC Herbicide to:

- Include wheat (spring, durum, and winter) and barley as host crops at the labelled rates for control of the labelled weeds.
- Add claims for suppression of volunteer canola and kochia and suppression or control of cleavers when it is applied alone and control of these weeds when it is applied in tank mix with atrazine.
- Add bromoxynil as a tank mix partner for improved control of certain broadleaf weeds controlled/suppressed by Tolpyralate 400SC applied alone.
- Allow aerial application on wheat and barley.
- Include a generic recommendation for use of methylated seed oil (MSO) adjuvants rather than a specific MSO product.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

Tolpyralate 400SC Herbicide for use on wheat and barley via ground and aerial application for postemergent weed control represents an expansion of the use pattern for tolpyralate. Mixer/loader/ applicator and postapplication quantitative risk assessments were conducted and no health risks of concern were identified provided that workers wear the appropriate personal protective equipment and follow all label directions.

Residue data from field trials conducted in Canada and the United States were submitted to support the use of Tolpyralate 400SC Herbicide on barley and wheat. Tolpyralate was applied to barley and wheat at label rates, and harvested according to label directions. In addition, processing studies in treated barley and wheat were reviewed to determine the potential for

concentration of residues of tolpyralate into processed commodities.

Maximum Residue Limits

The recommendation for proposed maximum residue limits (MRLs) for tolpyralate was based upon the submitted field trial data. MRLs to cover residues of tolpyralate in/on crops and processed commodities are proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRLs for the raw agricultural commodities (RACs).

TABLE 1. Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits (MRLs)

Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Tolpyralate Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Proposed MRL (ppm)
			LAFT	HAFT			
Barley	Foliar Broadcast/ 37.3-42.4	47-56	<0.01	<0.01	None	Not established	0.01
Wheat	Foliar Broadcast/ 38.4-41.6	47-58	<0.01	<0.01	None	Not established	0.01

ppm = parts per million; LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial

Following the review of all available data, the MRLs proposed in Table 1 are recommended to cover residues of tolpyralate. Dietary risks from exposure to residues of tolpyralate in these crop commodities at the proposed MRLs were shown to be acceptable for the general population and all subpopulations, including infants, children, adults and seniors. Thus the foods that contain residues as listed in Table 1 are considered safe to eat.

A toxicology assessment was not required for this application.

Environmental Assessment

The ground use expansion of Tolpyralate 400SC Herbicide to wheat and barley is within the currently registered uses for the active ingredient tolpyralate. Environmental risk from ground or aerial applications on wheat and barley are adequately addressed when the product is used according to the label directions, which include spray buffer zones.

Value Assessment

The expansion of the use pattern of Tolpyralate 400SC Herbicide to include more host and weed claims, an aerial application method, and a tank mixture with bromoxynil will provide users with

more flexibility to apply this product.

Value information submitted for review included scientific rationales and data from replicated field trials conducted in both Canada and the United States between 2019 and 2021. This information collectively supported the inclusion of wheat (spring, durum, and winter) and barley as host crops, claims for control or suppression of cleavers, kochia, and volunteer canola, and bromoxynil as a tank mix partner for improved control of certain weeds controlled/suppressed by Tolpyralate 400SC Herbicide alone.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the label amendments to the registration of Tolpyralate 400SC Herbicide.

References

PMRA Number	Reference
3286724	2021, Magnitude and Decline of the Residue of Tolpyralate in or on Wheat Raw Agricultural and Processed Commodities Following One Foliar Application of Tolpyralate 400 SC - 2019, DACO: 7.1,7.2.1,7.4.1,7.4.2
3286725	2021, Magnitude and Decline of the Residues of Tolpyralate and [CBI REMOVED] in or on Barley Raw Agricultural and Processed Commodities Following One Foliar Application of Tolpyralate 400 SC - 2020, DACO: 7.1,7.2.1,7.4.1,7.4.2
3286726	2021, Value summary for Tolpyralate 400SC Herbicide (Reg. No. 32901), for the addition of wheat (all types) and barley, DACO: 10.1, 10.2, 10.2.3.3, 10.3.2, 10.4, 10.5.3, and 10.5.4
3286727	2020, Weed control in corn with Group 27 herbicides +/- atrazine, bromoxynil, bentazon or glufosinate applied post-emergence I, DACO: 10.2.3.3
3286729	2020, Evaluation of SL-573 efficacy, DACO: 10.2.3.3
3286730	2020, Proposal 0029 - corn - Evaluation of SL-573 efficacy, DACO: 10.2.3.3
3286731	2020, Proposal 0032 - spring durum wheat - Evaluation of SL-573 efficacy, DACO: 10.2.3.3
3286732	2020, Proposal 0033 - spring wheat - Evaluation of small grain tolerance to SL-573, DACO: 10.2.3.3
3286733	2020, Proposal 0034 - barley - Evaluation of SL-573 efficacy, DACO: 10.2.3.3
3286734	2020, Proposal 0035 - barley - Evaluation of small grain tolerance to SL-573, DACO: 10.2.3.3
3286735	2020, Proposal 0061 - spring wheat - Evaluation of SL-573 efficacy, DACO: 10.2.3.3
3286736	2021, Evaluation SL-573 efficacy in small grains - Canada, DACO: 10.2.3.3
3286737	2020, Proposal 0029 - corn - Evaluation of SL-573 efficacy, DACO: 10.2.3.3
3286738	2020, Proposal 0032 - Evaluation of SL-573 efficacy in spring wheat, DACO: 10.2.3.3
3286739	2020, Proposal 0033 - Evaluation of small grain tolerance to SL-573 in durum wheat, DACO: 10.2.3.3
3286740	2020, Proposal 0035 - Evaluation of small grain tolerance to SL-573 in Barley, DACO: 10.2.3.3
3286741	2021, Evaluation SL-573 efficacy in small Grains - Canada (Spring Wheat), DACO: 10.2.3.3
3286742	2021, Small grains tolerance to SL-573 (barley), DACO: 10.2.3.3
3286743	2021, Small grains tolerance to SL-573 (durum), DACO: 10.2.3.3
3286744	2020, Proposal 0035 - spring barley - Evaluation of small grain tolerance to SL-573, DACO: 10.2.3.3
3286745	2020, Proposal 0035 - Spring Barley - Evaluation of small grain tolerance to SL-573, DACO: 10.2.3.3
3286746	2020, Proposal 0062 - Evaluation of SL-573 efficacy in spring wheat, DACO: 10.2.3.3
3286747	2019, Evaluation of SL-573 for POST emergence weed control in spring wheat, DACO: 10.2.3.3
3286748	2020, Evaluation of SL-573 for POST emergence weed control in spring wheat, DACO: 10.2.3.3

3286749 2020, Proposal 0034 - Evaluation of SL-573 efficacy on Barley, DACO: 10.2.3.3
3286750 2020, Evaluation of small grain tolerance to SL-573 2020NAM0573 CRG-TOL2, DACO: 10.2.3.3
3286751 2021, Proposal 0066 - Evaluation of small grain tolerance to SL-573 2020NAM0573 CRG-TOL2 - winter wheat, DACO: 10.2.3.3
3286752 2021, Proposal 0065 - Durum Wheat - Evaluation of small grain tolerance to SL-573, DACO: 10.2.3.3
3286753 2020, Proposal 0066 - winter wheat - Evaluation of small grain tolerance to SL-573, DACO: 10.2.3.3
3286754 2020, Proposal 0033 - Durum Wheat - Evaluation of small grain tolerance to SL-573, DACO: 10.2.3.3
3286756 2021, Evaluation SL-573 efficacy in Small Grains - Canada, DACO: 10.2.3.3
3286758 2021, Evaluation SL-573 efficacy in Small Grains - Canada, DACO: 10.2.3.3
3286760 2021, Proposal 0293 - Evaluation SL-573 efficacy in Small Grains - Canada, DACO: 10.2.3.3
3286762 2019, Volunteer canola control in corn with tolpyralate applied POST I, DACO: 10.2.3.3