

Appendix A

Trifluralin Product Formulations Containing Multiple Active Ingredients

The Agency does not routinely include, in its risk assessments, an evaluation of mixtures of active ingredients, either those mixtures of multiple active ingredients in product formulations or those in the applicator's tank. In the case of the product formulations of active ingredients (that is, a registered product containing more than one active ingredient), each active ingredient is subject to an individual risk assessment for regulatory decision regarding the active ingredient on a particular use site. If effects data are available for a formulated product containing more than one active ingredient, they may be used qualitatively or quantitatively^{1, 2}.

As discussed in USEPA (2000) a quantitative component-based evaluation of mixture toxicity requires data of appropriate quality for each component of a mixture. In this mixture evaluation an LD₅₀ with associated 95% CI is needed for the formulated product. The same quality of data is also required for each component of the mixture. In the case of trifluralin, given that there is no 95% CI associated with the oral LD₅₀ (>5000 mg/kg), it is not possible to undertake a quantitative or qualitative analysis for potential interactive effects. However, because the active ingredients are not expected to have similar mechanisms of action, metabolites, or toxicokinetic behavior, it is reasonable to conclude that an assumption of dose-addition would be inappropriate. Consequently, an assessment based on the toxicity of trifluralin is the only reasonable approach that employs the available data to address the potential acute risks of the formulated products.

¹ Overview of the Ecological Risk Assessment Process in the Office of Pesticide Programs, Environmental Protection Agency (January 2004) (Overview Document).

² Memorandum to Office of Prevention, Pesticides and Toxic Substance, US EPA conveying an evaluation by the U.S. Fish and Wildlife Service and National Marine Fisheries Service of an approach to assessing the ecological risks of pesticide products (January 2004).

Pesticide Products Formulated with Trifluralin and Other Pesticide Active Ingredients

TRIFLURALIN PRODUCTS^{3,4}

PRODUCT/TRADE NAME	EPA Reg.No.	% Trifluralin	PRODUCT		ADJUSTED FOR ACTIVE INGREDIENT	
			LD 50 (mg/kg)	CI (mg/kg)	LD50 (mg/kg)	CI (mg/kg)
TRI-SCEPT HERBICIDE	000241-00307	28.6	5612	4277 -7364	1605	1223-2106
COMMENCE EC	000279-03104	32	3936	3199-4672	1259	1024-1495
LEBANON LAWN CRABGRASS PREVENTER WITH FERTILIZER	000961-00346	0.385	>500	N/A	N/A	N/A
LEBANON LAWN FERTILIZER WITH TEAM CRABGRASS CONTROL	000961-00348	0.515	>500	N/A	N/A	N/A
LEBANON PREEN PRO 1.875G	000961-00370	1.5	>2500	N/A	N/A	N/A
LEBANON LAWN FERTILIZER CONTAINS CONFRONT AND TEAM	000961-00390	0.43	>500	N/A	N/A	N/A
LEBANON TURF FERTILIZER WITH CONFRONT AND TEAM	000961-00391	0.43	>500	N/A	N/A	N/A
PREEN LANDSCAPE MULCH	000961-00408	0.003	>2500	N/A	N/A	N/A
BAYONET 2	005905-00554	10	>5000	N/A	N/A	N/A
25-5-10 TURF FOOD WITH CRABGRASS CONTROL	008378-00017	0.38	>500	N/A	N/A	N/A
SHAW'S PREMIUM TURF FOOD WITH CRABGRASS CONTROL	008378-00018	0.43	>500	N/A	N/A	N/A

³ From registrant submitted data to support registration. Compiled by Office of Pesticide Programs Registration and Health Effects Divisions.

⁴ Trifluralin: Oral LD50: >5000 mg/kg

N/A= Not Applicable

PRODUCT/TRADE NAME	EPA Reg.No.	% Trifluralin	PRODUCT		ADJUSTED FOR ACTIVE INGREDIENT	
			LD 50 (mg/kg)	CI (mg/kg)	LD50 (mg/kg)	CI (mg/kg)
PREMIUM LAWN FOOD WITH CRABGRASS CONTROL	008378-00019	0.5	>500	N/A	N/A	N/A
SHAW'S 18-5-9 TURF FOOD WITH XL CRABGRASS CONTROL	008378-00020	0.3	>500	N/A	N/A	N/A
SHAW'S TURF FOOD & CRABGRASS CONTROL W/TEAM 142	008378-00037	0.49	>500	N/A	N/A	N/A
THE ANDERSONS TEE TIME FERTILIZER WITH 1.15% TEAM	009198-00079	0.38	>500	N/A	N/A	N/A
THE ANDERSONS TEE TIME WITH 0.92% TEAM	009198-00094	0.3	>500	N/A	N/A	N/A
BUCKLE 10G HERBICIDE	010163-00289	3	>5000	N/A	N/A	N/A
FERTILIZER WITH STARTEEM(R) #1	052287-00010	0.375	>5000	N/A	N/A	N/A
FERTILIZER WITH STARTEEM(R) #2	052287-00011	0.25	>5000	N/A	N/A	N/A
WEED-FREE ONE ELEVEN	052287-00013	0.2	>2500	N/A	N/A	N/A
HARRELL'S GRANULAR HERBICIDE 75	052287-00015	3	>5000	N/A	N/A	N/A
TEAM 2G	062719-00137	0.67	>500	N/A	N/A	N/A
TURF FERTILIZER CONTAINS TEAM 1.15%	062719-00150	0.39	>500	N/A	N/A	N/A
TURF FERTILIZER - CONTAINS TEAM 0.92%	062719-00151	0.31	>500	N/A	N/A	N/A
TURF FERTILIZER CONTAINS TEAM 1.25%	062719-00152	0.43	>500	N/A	N/A	N/A
SNAPSHOT 2.5 TG	062719-00175	2	>2500	N/A	N/A	N/A
TURF FERTILIZER CONTAINS GALLERY PLUS TEAM	062719-00192	0.27	>500	N/A	N/A	N/A

PRODUCT/TRADE NAME	EPA Reg.No.	% Trifluralin	PRODUCT		ADJUSTED FOR ACTIVE INGREDIENT	
			LD 50 (mg/kg)	CI (mg/kg)	LD50 (mg/kg)	CI (mg/kg)
BROADSTRIKE + TREFLAN	062719-00222	36.35	3162	No Data	1149	N/A
T&O FERTILIZER-CONTAINS GALLERY PLUS TEAM	062719-00280	0.39	>500	N/A	N/A	N/A
TURF FERTILIZER - CONTAINS TEAM* PRO {X.XX}%	062719-00289	0.5	>500	N/A	N/A	N/A
TURF FERTILIZER-CONTAINS TEAM (XXX) %	062719-00290	0.29	>500	N/A	N/A	N/A
TEAM MU	062719-00317	32.2	No Data	No Data	N/A	N/A
TEAM PRO MU	062719-00318	48.2	No Data	No Data	N/A	N/A
SUPER TEAM* 1.25%	062719-00327	0.43	>500	N/A	N/A	N/A
SUPER TEAM* 1.15%	062719-00331	0.39	>500	N/A	N/A	N/A
SUPER TEAM* 0.92%	062719-00332	0.31	>500	N/A	N/A	N/A
SHOWCASE	062719-00516	2	No Data	No Data	N/A	N/A
TURF FERTILIZER - CONTAINS GALLERY PLUS TEAM PRO	062719-00565	0.5	No Data	No Data	N/A	N/A