



Department of Pesticide Regulation



Brian R. Leahy
Director

MEMORANDUM

Edmund G. Brown Jr.
Governor

TO: Dr. Marylou Verder-Carlos
Assistant Director
Pesticide Programs Division

HSM-16015
(No. assigned after issuance of memo)

FROM: Lisa Ross, Ph.D.
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[Original signed by L. Ross]

DATE: June 30, 2016

SUBJECT: COMPLETION OF EPTC MITIGATION

This memorandum describes the findings of the Worker Health and Safety Branch (WHS) in regards to the need for mitigation of exposures to S-Ethyl-dipropylthiocarbamate (EPTC), a thiocarbamate herbicide.

In 1995, DPR's Risk Characterization Document (RCD) for EPTC (Meierhenry 1995) identified multiple exposure scenarios for EPTC handlers for which Margins of Safety (now called Margins of Exposure) were less than 100. In 1998, DPR scientists determined that a combination of additional personal protective equipment (PPE) and work restrictions could adequately mitigate EPTC exposure for the scenarios of concern (Thongsinthusak 1998). At that time, however, those mitigation measures were not included on EPTC product labels.

As of June 2016, there are two EPTC products with active California registrations (DPR 2016a):

- Eptam 20-G Granules (EPA Reg. No. 10163- 281); and
- Eptam 7E Selective Herbicide (EPA Reg. No. 10163-283).

WHS has reviewed the most recent DPR-approved product labels for these two products and determined that both of these products have California-only supplemental labels that adequately mitigate the exposure scenarios of concern, as summarized in Table 1 below. Registration Branch staff determined that DPR first approved those supplemental labels in the early 2000's.

Although EPTC use in California has declined, EPTC continues to be used in production of alfalfa, potatoes, and certain other commodities (DPR 2016b). In 1995, the year of the RCD, reported use of EPTC was 663,701 pounds of active ingredient statewide. Ten years later, in 2005, reported use had dropped to 181,790 pounds. In 2014, the most recent year for which use statistics are available, EPTC use was 235,270 pounds, primarily on alfalfa and potatoes (DPR 2016b).

Despite ongoing EPTC use, during the most recent 10 years for which illness statistics are available, 2004 through 2013, only two cases of handler illness or injury associated with EPTC were reported to DPR's Pesticide Illness Surveillance Program (DPR 2016c).

Table 1. Summary of mitigation measures on California-only supplemental labels for EPTC products with active California registrations as of June 2016

Mitigation measure	Requirement on the California-only supplemental label of:	
	Eptam 20-G (EPA Reg. No. 10163-281)	Eptam 7E (EPA Reg. No. 10163-283)
Additional PPE	Handlers (except pilots) must wear coveralls and half-face respirators in addition to PPE on the product label	Handlers (except applicators for water-run chemigation) must wear coveralls and half-face respirators in addition to PPE on the product label
PPE for chemigation	n/a (labels do not allow chemigation)	For center-pivot irrigation systems, mixer/loader/applicators must wear full-body chemical resistant clothing and half-face respirators in addition to the PPE on the product label. A closed mixing/loading system, an enclosed cab, or other engineering controls may replace the PPE clothing according to the criteria in the current federal Worker Protection Standard.
Work restrictions	Limit mixing / loading to a maximum of 1,000 pounds per handler per 21-day period, not to exceed 100 pounds per handler per day	Limit mixing/loading to 500 gallons per mixer/loader per 21-day period, not to exceed 75 gallons per mixer/loader per day Limit application through center pivot irrigation to 40 gallons per applicator per 21-day period, not to exceed 20 gallons per applicator per day Limit other ground applications to 210 gallons per applicator per 21-day period, not to exceed 30 gallons per applicator per day. If ground applicators use enclosed cabs, limit application to 280 gallons per applicator per 21-day period, not to exceed 30 gallons per applicator per day.
Record-keeping to support work restrictions	The operator of the property shall include in their Pesticide Use Records the name of the person(s) that handled the product for each application	

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Given that all currently-registered EPTC products have California-only supplemental labels containing mitigation measures that adequately address the exposure scenarios of concern (Thongsinthusak 1998), and given the low number of reports of EPTC-related illness during the past 10 years, WHS finds that there is no need for further mitigation action for EPTC. Your approval of this conclusion is requested.

cc: Kevin Solari, Environmental Program Manager I, Worker Health & Safety Branch
Ann Hanger, Senior Environmental Scientist (Specialist), Registration Branch

APPROVAL

[Original signed by M. Verder-Carlos]
Marylou Verder-Carlos, Assistant Director

7/5/2016
Date

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