

## Mancozeb Task Force

c/o McDermott, Will & Emery, LLP  
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Washington, DC 20001

Dow AgroSciences LLC

United Phosphorus, Inc.

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Dear Colleague:

The members of the Mancozeb Task Force, including Dow AgroSciences LLC and United Phosphorus, Inc. are writing to inform you of the United States Environmental Protection Agency's (EPA's) recent changes in the United States (US) mancozeb tolerances. The tolerance revisions were published as a Final Rule in the Wednesday, May 14, 2014 Federal Register, Volume 79, Number 93, pages 27496-27502. The tolerances will go into effect November 14, 2014 unless objections are submitted to EPA on or before July 14, 2014.

These are the first mancozeb tolerance revisions since the tolerances were established in the 1960's. The changes were first detailed in the Mancozeb Reregistration Eligibility Decision (RED) of 2005. Specifically, the revisions include:

1) A change in the tolerance expression from zineb ((another ethylene bisdithiocarbamate (EBDC fungicide)) equivalents to carbon disulfide (CS<sub>2</sub>) equivalents.

The tolerance expression for Codex, the European Union, and many other countries is based on CS<sub>2</sub>. Therefore, EPA's change harmonizes the tolerance expression with these entities. The Task Force members support this change.

2) A reevaluation of the tolerance levels, resulting in the level being maintained, reduced, or increased based on residue data with the current use patterns. The tolerance levels were set at a level that would cover the highest residues in the field trials.

A table comparing the previous and the new tolerances is attached. The Codex tolerances (MRLS) are included for an international comparison. Note that because zineb and CS<sub>2</sub> have different molecular weights, 1 ppm of CS<sub>2</sub> = 1.78 ppm of zineb. Therefore, an old US tolerance of 2 ppm is equivalent to approximately 1 ppm of CS<sub>2</sub>.

The changes in the US tolerances for apples and pears represent the greatest reductions. The reductions are due to the decrease in residues with the current use pattern established at the conclusion of the EBDC Special Review in 1992. This use pattern has significantly longer pre-harvest intervals (PHI), lower rates than pre-1992 and a limit on the number of applications.

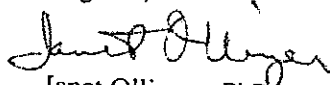
There are also reductions in the grape and tomato tolerances. For grapes, the 1992 use pattern change was less significant. The previous tolerance was set at a high level. For tomatoes, the greatest change in the use pattern was a limitation on the number of applications. Prior to the Special Review there was no limit on the number of applications for any crops; limitations were established for all crops in 1992.

The reduced tolerance levels for apples, pears, grapes, and tomatoes have the potential to create issues for imported crops. Wine will not be impacted because there are generally no residues or low mancozeb residues in wine. The Task Force members are investigating the potential trade impacts and would appreciate receiving any information or comments you might have.

The recent tolerances established for head lettuce, leaf lettuce, broccoli, cabbage, peppers, almonds, walnuts, imported tangerines, the cucurbit crop group, tropical fruits, and ginseng were established based on CS<sub>2</sub> equivalents. Therefore, the tolerances for these crops remain the same as the original tolerances.

Please contact me at [janetollinger@cs.com](mailto:janetollinger@cs.com) or (267) 218-2704 if you have any questions.

Regards,



Janet Ollinger, PhD  
Chairperson

Mancozeb Tolerance Comparison				
Crop	Previous US Tolerance CFR 180.176 Except Potatoes @180.319 All expressed as Zineb		New US Tolerances in 5/15/14 Federal Register	JMPR MRLs Dithiocarbamate Group
	Zineb Equivalents (the level in 180.176)	How Zineb Translates to CS <sub>2</sub> (zineb/1.78 = CS <sub>2</sub> )	CS <sub>2</sub> ,	CS <sub>2</sub>
Almond			0.1	0.1
Almond hulls			4	20
Apples	7	4	0.6	5 (pome fruit)
Asparagus	0.1	0.06	0.1	0.1
Atemoya			3.0	
Bananas	4	2.3	2	2
Barley, grain	5	2.8	5	1
Barley, bran			20	
Barley, pearled			20	
Barley, flour			20	
Barley, straw	25	14	25	25
Beet, sugar dried pulp			3.0	
Beet, sugar, roots	2	1.1	1.2	0.5
Beet, sugar, tops	65	36.5	60	20
Broccoli			7	
Cabbage			9	5
Canistel			15	
Carrots			1 (24c)	1
Cattle, kidney	0.5	0.3	0.5	
Cattle, liver	0.5	0.3	0.5	
Cherimoya			3	
Corn, field, forage	5	2.8	40	
Corn, field,	0.1	0.06	0.1	

grain				
Corn, field, stover			15	
Corn, pop, grain			0.1	
Corn, pop, stover			40	
Corn, sweet, forage	5	2.8	70	
Corn, sweet (K+ CHWR)	0.5	0.3	0.1	0.1
Corn, sweet, stover			40	
Cottonseed, undelinted	0.5	0.3	0.5	
Crabapples	10	5.6	0.6	5 (pome fruits)
Cranberries	7	3.9	5	5
Custard apple			3	
Fennel	10	5.6	2.5	
Flax, seed			0.15	
Garlic	See onions		1.5	
Ginseng	2.0 (Sec.18)	1.1	1.2	
Goat, kidney			0.5	
Goat, liver			0.5	
Grapes	7	3.9	1.5	5
Hog, kidney			0.5	
Hog, liver			0.5	
Horse, kidney			0.5	
Horse, liver			0.5	
Lettuce, head			3.5	10
Lettuce, leaf			18	10 (cos)
Mango			15	2
Oat, flour			20	
Oats, grain	5	2.8	0.6	
Oats, groats/rolled oats			20	
Oats, straw	25	14.0	25	
Onions (dry bulb)	0.5 Garlic, onions,	0.3	1.5	0.5

	shallots			
Papaya	10	5.6	10	5
Peanuts	0.5	0.3	0.1	0.1
Peanut vine hay	65	36.5	65	
Pears	10	5.6	0.6	5 (pome fruit)
Peppers			12	1
Potatoes	1 (interim)	0.56	0.2	0.2
Poultry, kidney			0.5	
Poultry, liver			0.5	
Quince			0.6	5 (pome)
Rice, grain			0.06	
Rye, bran			20	
Rye, grain	5	2.8	5	
Rye, straw	25	14.0	25	
Sapodilla			15	
Sapote, mamey			15	
Sapote, white			15	
Sheep, kidney			0.5	
Sheep, liver			0.5	
Sorghum, forage			0.15	
Sorghum, grain			0.25	
Sorghum, stover			0.15	
Star apple			15	
Sugar apple			3	
Tangerine (import)			10	10 (mandarins)
Tomatoes	4	2.2	2.5	5
Vegetable, cucurbit, group 9	4 Cucumber, Melons Summer squash	2.2	2	2 (cucumbers) 0.5 (melons) 1 (summer squash) 1 (watermelon) 0.1 (winter

Walnut			0.70	squash)
Wheat, bran			20	
Wheat, flour			20	
Wheat, germ			20	
Wheat, grain	5	2.8	5	1
Wheat, middlings			20	
Wheat, shorts			20	
Wheat, straw			25	25