

use pesticide if a toxicological study has indicated the possibility of an effect of concern occurring as a result of a 1 day or single exposure. The Dietary Exposure Evaluation Model (DEEM™) with the Food Commodity Intake Database (FCID) analysis evaluated the individual food consumption as reported by respondents in the U.S. Department of Agriculture (USDA) 1994–1996 and 1998 Nationwide Continuing Surveys of Food Intake by Individuals (CSFII) and accumulated exposure to the chemical for each commodity. The following assumptions were made for the acute exposure assessments: The residues of concern for the acute analysis are thiamethoxam and its metabolite. The assessment assumed that 100% of the registered and proposed crops were treated and that all treated crops and livestock had residues of concern at the tolerance level. The general U.S. population and all population subgroups have exposure and risk estimates which are below EPA's LOC (i.e., the aPADs are all below 100%). The most highly exposed subgroup is children 1 to 2 years of age, which utilizes 3% of the aPAD.

ii. *Chronic exposure.* In conducting this chronic dietary risk assessment the DEEM™ with the FCID analysis evaluated the individual food consumption as reported by respondents in the USDA 1994–1996 and 1998 nationwide CSFII and accumulated exposure to the chemical

for each commodity. The following assumptions were made for the chronic exposure assessments: The residues of concern for the chronic analysis are thiamethoxam and its metabolite. The chronic analysis was based on average field trial residue values as well as percent crop estimates. The general U.S. population and all population subgroups have exposure and risk estimates which are below EPA's LOC (i.e., the cPADs are all below 100%). The most highly exposed subgroup is children 1 to 2 years of age, which utilizes 17% of the cPAD.

iii. *Cancer.* The residue of concern for the cancer analysis is thiamethoxam, per se. The residues of its metabolite were removed from the cancer analysis because the metabolite was found to be “not likely to be carcinogenic to humans” when it was evaluated as an active ingredient. The cancer analysis was based on average field trial residue values as well as percent crop treated (PCT) estimates. The estimated cancer risk from dietary exposure to thiamethoxam is 9.04×10^{-7} .

iv. *Anticipated residue and PCT information.* Section 408(b)(2)(E) of the FFDCA authorizes EPA to use available data and information on the anticipated residue levels of pesticide residues in food and the actual levels of pesticide chemicals that have been measured in food. If EPA relies on such information, EPA must require that data be provided 5 years after the tolerance is established,

modified, or left in effect, demonstrating that the levels in food are not above the levels anticipated. Following the initial data submission, EPA is authorized to require similar data on a time frame it deems appropriate. As required by section 408(b)(2)(E) of the FFDCA, EPA will issue a Data Call-In for information relating to anticipated residues to be submitted no later than 5 years from the date of issuance of this tolerance.

Section 408(b)(2)(F) of the FFDCA states that the Agency may use data on the actual percent of food treated for assessing chronic dietary risk only if the Agency can make the following findings: Condition 1, that the data used are reliable and provide a valid basis to show what percentage of the food derived from such crop is likely to contain such pesticide residue; condition 2, that the exposure estimate does not underestimate exposure for any significant subpopulation group; and condition 3, if data are available on pesticide use and food consumption in a particular area, the exposure estimate does not understate exposure for the population in such area. In addition, the Agency must provide for periodic evaluation of any estimates used. To provide for the periodic evaluation of the estimate of PCT as required by section 408(b)(2)(F) of the FFDCA, EPA may require registrants to submit data on PCT. The Agency used PCT information in the following Table 2:

TABLE 2.—THIAMETHOXAM USES AND ESTIMATES OF CROP TREATED

Commodity	Percent Crop Treated ¹
Apples	5
Casabas	44
Cherries (sweet)	37
Cherries (tart)	88
Coffee	100
Crabapples	53
Crenshaws	44
Cucumbers	5
Field corn	6
Fruiting vegetables (except cucurbits - crop group 8)	15
Lima beans (fresh)	37
Lima beans (processed)	52
Loquats	53
Melons	13
Peaches	45