

of 307 mg/kg/day observed in the 13-week dog study. These risk estimates (margin of exposures (MOE)) for

toddlers (1 to 3 years of age) are summarized below. From the results below, Mitsui concludes there is

reasonable certainty of no harm associated with the aggregate (dietary + non-dietary) exposure to dinotefuran.

TABLE 2.—INTERMEDIATE-TERM AGGREGATE MOES

Exposure Routes	Dietary	RTU Spray	Fogger	Turf	Cat	Aggregate
Toddlers (1 to 3 years old)						
Dietary	184,163	NA	NA	NA	NA	184,163
Incidental Ingestion	NA	23,356	11,431	80,050	1,850	1,410
Total						1,410

3. *Drinking water exposure.* EPA uses the drinking water level of comparison (DWLOC) as a theoretical upper limit on a pesticide's concentration in drinking water when considering total aggregate exposure to a pesticide in food, drinking water, and residential uses. DWLOCs are not regulatory standards for drinking water; however, EPA uses DWLOCs in the risk assessment process as a surrogate measure of potential exposure from drinking water. In the absence of monitoring data for pesticides, it is used as a point of comparison against

conservative model estimates of a pesticides concentration in water.

An estimate of the drinking water environmental concentration (DWEc) in ground water and surface water for dinotefuran has been made for this notice of filing. The DWEc of dinotefuran in ground water was estimated to be 0.94 part per billion (ppb) using screening concentration in ground water (SCI-GROW) (the screening model for ground water), and the DWEc for surface water was estimated to be 6.24 ppb (for chronic and intermediate-term aggregate

assessments) using FQPA Index Reservoir Screening Tool (FIRST).

To calculate the DWLOC for chronic aggregate exposure relative to a chronic toxicity endpoint, the chronic dietary food exposure from EXPedite™, as addressed above, was subtracted from the reference dose (RfD) to obtain the acceptable chronic exposure to dinotefuran in drinking water. DWLOCs, as presented below, were then calculated using default body weights and drinking water consumption figures.

TABLE 3.—CHRONIC AGGREGATE DRINKING WATER ASSESSMENT

Population Subgroup	Dietary Mg/Kg Bwt/Day	Maximum Water Exposure Mg/Kg Bwt/Day	Kg Bwt	SCI-GROW (ppb)	FIRST (ppb)	DWLOC (ppb)
U.S. population	0.004109	1.265891	70	0.94	6.24	44,306
All infants (<1-year old)	0.002815	1.267185	10	0.94	6.24	12,672
Non-nursing infants	0.003438	1.266562	10	0.94	6.24	12,666
Children (1 to 6)	0.007247	1.262753	20	0.94	6.24	25,255
Children (7 to 12)	0.004348	1.265652	40	0.94	6.24	50,626
Females (13 to 50)	0.003350	1.266650	60	0.94	6.24	38,000
Males (13+ years)	0.003173	1.266827	70	0.94	6.24	44,339

Chronic RfD used in assessments - 1.27 mg/kg bwt/day

The estimated average concentration of dinotefuran in surface water is 6.24 ppb. This value is less than the lowest DWLOC for dinotefuran as a contribution to chronic aggregate exposure (12,666 ppb for non-nursing infants, the most highly exposed population group for the chronic scenario). Therefore, taking into account the proposed uses, it can be concluded

with reasonable certainty that residues of dinotefuran in food and drinking water will not result in unacceptable levels of human health risk.

To calculate the DWLOC for the intermediate-term aggregate exposure relative to a sub-chronic toxicity endpoint, the chronic dietary food exposure from EXPedite™ plus the intermediate-term non-dietary

exposures were subtracted from the NOAEL, divided by the target MOE (100), to obtain the acceptable intermediate-term exposure to dinotefuran in drinking water. DWLOCs, as presented below, were then calculated using default body weights and drinking water consumption figures.