

TABLE 2.—SUMMARY OF TOXICOLOGICAL DOSE AND ENDPOINTS FOR HYDRAMETHYLNON FOR USE IN HUMAN RISK ASSESSMENT

Exposure Scenario	Dose Used in Risk Assessment, UF	FQPA SF* and Level of Concern for Risk Assessment	Study and Toxicological Effects
Acute Dietary (Females 13–50 years of age)	NOAEL = 5 mg/kg/day UF = 100 Acute RfD = 0.05 mg/kg/day	FQPA SF = 1 aPAD = acute RfD ÷ FQPA SF = 0.05 mg/kg/day	Developmental toxicity in rabbits LOAEL = 10 mg/kg/day based on abortions.
Acute Dietary (General population including infants and children)	-	-	There is no appropriate single dose endpoint for the general population.
Chronic Dietary (All populations)	NOAEL = 1.66 mg/kg/day UF = 100 Chronic RfD = 0.017 mg/kg/day	FQPA SF = 1 cPAD = chronic RfD ÷ FQPA SF = 0.017 mg/kg/day	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Short-Term Incidental Oral (1–30 days)	Oral NOAEL = 1.66 mg/kg/day	LOC for MOE = 100 (Residential)	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Intermediate-Term Incidental Oral (1–6 months)	Oral NOAEL = 1.66 mg/kg/day	LOC for MOE = 100 (Residential)	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Short-Term Dermal (1 to 30 days)(Residential)	Oral NOAEL = 1.66 mg/kg/day (dermal absorption rate = 1%)	LOC for MOE = 100 (Residential)	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Intermediate-Term Dermal (1 week to 6 months) (Residential)	Oral NOAEL = 1.66 mg/kg/day (dermal absorption rate = 1%)	LOC for MOE = 100 (Residential)	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Long-Term Dermal (several months to lifetime) (Residential)	Oral NOAEL = 1.66 mg/kg/day (dermal absorption rate = 1%)	LOC for MOE = 100 (Residential)	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Short-Term Inhalation (1 to 7 days) (Residential)	inhalation (or oral) study NOAEL = 1.66 mg/kg/day (inhalation absorption rate = 100%)	LOC for MOE = 100 (Residential)	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Intermediate-Term Inhalation (1 week to several months) (Residential)	inhalation (or oral) study NOAEL = 1.66 mg/kg/day (inhalation absorption rate = 100%)	LOC for MOE = 100 (Residential)	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Long-Term Inhalation (several months to lifetime) (Residential)	inhalation (or oral) study NOAEL = 1.66 mg/kg/day (inhalation absorption rate = 100%)	LOC for MOE = 100 (Residential)	2-Generation reproductive toxicity in rats LOAEL = 3.32 mg/kg/day based on testicular effects.
Cancer (oral, dermal, inhalation)	The Agency's Cancer Peer Review Committee determined that hydramethylnon should be classified as a Group C-possible human carcinogen, and recommended that, for the purpose of risk characterization, the Reference Dose approach should be used for quantification of human risk. The Cancer Peer Review report was issued on March 28, 1991. The Agency's HIARC committee concurred with the cancer classification on March 4, 2003.		

* The reference to the FQPA SF refers to any additional SF retained due to concerns unique to the FQPA.

C. Exposure Assessment

1. *Dietary exposure from food and feed uses.* Tolerances have been established (40 CFR 180.395) for the residues of hydramethylnon, on grass and grass hay for pasture and rangeland

at 0.05 ppm established in terms of parent only, tetrahydro-5,5-dimethyl-2(1H)-pyrimidinone (3-(4-(trifluoromethyl)phenyl)-1-(2-(4-(trifluoromethyl)phenyl)ethenyl)-2-propenylidene) hydrazone. The Agency

determined that the residue of concern in grasses and the milk, meat, and meat byproducts of ruminants is hydramethylnon per se, and that there is no reasonable expectation of finite hydramethylnon residues of concern in