

Appendix C: Estimation of Upper-bound Aquatic Exposure

GENEEC2 input parameters for Rozol Prairie Dog Bait application

Property	Value	Source	Comment
Solubility	34 ppm	1998 RED	
Hydrolysis	Stable	MRID 42205501	At pH 5, 7, and 9
Photolysis in Water	90 min (half-life)	MRID 42205502	
Photodegradation on Soil	4 days (half-life)	MRID 42452301	
Aerobic Soil Degradation	65 days (half-life)	MRID 43159801	Calculated using input parameter guidance (EPA 2009)
K _{ads}	126 ml/g	MRID 42666001	Determined using input parameter guidance (EPA 2009)
K _{oc}	35,400 ml/g	MRID 42666001	Determined using input parameter guidance (EPA 2009)
Vapor pressure	3.6×10^{-8} mm Hg	1998 RED	
Henry's law	5.2×10^{-8} atm-m ³ /mol	1998 RED	
K _{ow}	94	1998 RED	
Incorporation depth	4 inches	Label	Label requires 6 inches, adjusted to 4 inches to account for bioturbation
Application rate	0.00058 lbs a.i./A	Label	
Number of applications	2	Label	
Application interval	21 days	Label	Not specified- likely minimum interval deduced from label

Modeling results:

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RUN No.    1 FOR chlorophacinone  ON   btpd                * INPUT VALUES *
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RATE (#/AC)  No.APPS &  SOIL  SOLUBIL  APPL TYPE NO-SPRAY INCORP
ONE(MULT)   INTERVAL   Koc  (PPM )  (%DRIFT)  (FT)    (IN)
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.001( .001)  2  21   35400.0  34.0   GRANUL( .0)    .0    4.0
  
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FIELD AND STANDARD POND HALFLIFE VALUES (DAYS)

METABOLIC (FIELD)	DAYS UNTIL RAIN/RUNOFF	HYDROLYSIS (POND)	PHOTOLYSIS (POND-EFF)	METABOLIC (POND)	COMBINED (POND)
65.00	2	N/A	.06-	7.75	130.00
					7.31

GENERIC EECs (IN NANOGRAMS/LITER (PPT_r)) Version 2.0 Aug 1, 2001

PEAK GEEC	MAX 4 DAY AVG GEEC	MAX 21 DAY AVG GEEC	MAX 60 DAY AVG GEEC	MAX 90 DAY AVG GEEC
1.00	.84	.37	.14	.09