

Calculation: Potential Doses and Margins of Exposure
Scenario: Public Receptors - Accidental Exposure - Direct Spray of Person
Pathway: Dermal Contact with Pesticide

Pesticide	Public Receptor	Dermal Absorption Factor	Typical Application Rate (lb a.i./acre)	Exposure Factor (cm ² /kg-day)	Unit Correction Factor (mg/cm ²)/(lb/acre)	Dermal Dose (mg/kg-day)	Dermal NOAEL (mg/kg-day) Short	MOE (unitless) Short	Target MOE	Aggregate Risk Index
Diquat	Angler	4.10E-02	1.00E+00	6.43E+01	1.12E-02	2.96E-02	1.00E+00	3.38E+01	1.00E+02	3.38E-01
Diquat	Berry - adult	4.10E-02	1.00E+00	6.43E+01	1.12E-02	2.96E-02	1.00E+00	3.38E+01	1.00E+02	3.38E-01
Diquat	Berry - child	4.10E-02	1.00E+00	1.07E+02	1.12E-02	4.93E-02	1.00E+00	2.03E+01	1.00E+02	2.03E-01
Diquat	Hiker/Hunter	4.10E-02	1.00E+00	6.43E+01	1.12E-02	2.96E-02	1.00E+00	3.38E+01	1.00E+02	3.38E-01
Diquat	N.American-adult	4.10E-02	1.00E+00	6.43E+01	1.12E-02	2.96E-02	1.00E+00	3.38E+01	1.00E+02	3.38E-01
Diquat	N.American-child	4.10E-02	1.00E+00	1.07E+02	1.12E-02	4.93E-02	1.00E+00	2.03E+01	1.00E+02	2.03E-01
Diquat	Res-adult	4.10E-02	1.00E+00	6.43E+01	1.12E-02	2.96E-02	1.00E+00	3.38E+01	1.00E+02	3.38E-01
Diquat	Res-child	4.10E-02	1.00E+00	1.07E+02	1.12E-02	4.93E-02	1.00E+00	2.03E+01	1.00E+02	2.03E-01
Fluridone	Berry - child	4.00E-01	4.10E-01	1.07E+02	1.12E-02	1.97E-01	2.50E+01	1.27E+02	1.00E+02	1.27E+00
Fluridone	N.American-child	4.00E-01	4.10E-01	1.07E+02	1.12E-02	1.97E-01	2.50E+01	1.27E+02	1.00E+02	1.27E+00
Fluridone	Res-child	4.00E-01	4.10E-01	1.07E+02	1.12E-02	1.97E-01	2.50E+01	1.27E+02	1.00E+02	1.27E+00

NA - Not Available.

NC - Not Calculated (No dose-response value).

Calculation: Potential Doses and Margins of Exposure
Scenario: Public Receptors - Accidental Exposure - Re-entry to Posted Area
Pathway: Dermal Contact with Foliage

Pesticide	Public Receptor	Fraction a.i. Retained on Foliage	Dermal Absorption Factor	Typical Application Rate (lb a.i./acre)	Unit Correction Factor (mg/cm ²)/(lb/acre)	Dislodgeable Foliar Residue (mg/cm ²)	Exposure Factor (cm ² /kg-day)	Dermal Dose (mg/kg-day)	Dermal NOAEL (mg/kg-day) Short	MOE (unitless) Short	Target MOE	Aggregate Risk Index
Diquat	Angler	2.00E-01	4.10E-02	1.00E+00	1.12E-02	2.24E-03	2.86E+01	2.63E-03	1.00E+00	3.81E+02	1.00E+02	3.81E+00
Diquat	Berry - adult	2.00E-01	4.10E-02	1.00E+00	1.12E-02	2.24E-03	4.29E+01	3.94E-03	1.00E+00	2.54E+02	1.00E+02	2.54E+00
Diquat	Berry - child	2.00E-01	4.10E-02	1.00E+00	1.12E-02	2.24E-03	4.00E+01	3.68E-03	1.00E+00	2.72E+02	1.00E+02	2.72E+00
Diquat	Hiker/Hunter	2.00E-01	4.10E-02	1.00E+00	1.12E-02	2.24E-03	2.86E+01	2.63E-03	1.00E+00	3.81E+02	1.00E+02	3.81E+00
Diquat	N.American-adult	2.00E-01	4.10E-02	1.00E+00	1.12E-02	2.24E-03	6.43E+01	5.91E-03	1.00E+00	1.69E+02	1.00E+02	1.69E+00
Diquat	N.American-child	2.00E-01	4.10E-02	1.00E+00	1.12E-02	2.24E-03	6.00E+01	5.52E-03	1.00E+00	1.81E+02	1.00E+02	1.81E+00
Diquat	Res-adult	2.00E-01	4.10E-02	1.00E+00	1.12E-02	2.24E-03	4.14E+02	3.81E-02	1.00E+00	2.63E+01	1.00E+02	2.63E-01
Diquat	Res-child	2.00E-01	4.10E-02	1.00E+00	1.12E-02	2.24E-03	6.93E+02	6.38E-02	1.00E+00	1.57E+01	1.00E+02	1.57E-01
Fluridone	Res-adult	2.00E-01	4.00E-01	4.10E-01	1.12E-02	9.20E-04	4.14E+02	1.52E-01	1.25E+02	8.20E+02	1.00E+02	8.20E+00
Fluridone	Res-child	2.00E-01	4.00E-01	4.10E-01	1.12E-02	9.20E-04	6.93E+02	2.55E-01	2.50E+01	9.80E+01	1.00E+02	9.80E-01

NA - Not Available.

NC - Not Calculated (No dose-response value).

Calculation: Potential Doses and Margins of Exposure

Scenario: Public Receptors - Accidental Exposure - Spill and Direct Spray of Pesticide to Waterbody

Pathway: Incidental Ingestion and Dermal Contact with Water While Swimming

Pesticide	Public Receptor	Accident Source	Skin Permeability Constant (cm/hr)	Typical Water Conc. (mg/L)	Unit Correction Factor (L/cm3)	Dermal Contact		Incidental Ingestion		Oral NOAEL (mg/kg-day) Short	Dermal MOE (unitless) Short/Int	Oral MOE (unitless) Short/Int	Target MOE	Aggregate Risk Index
						Exposure Factor (cm2-hr/kg-day)	Absorbed Dose (mg/kg-day)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)					
Diquat	Swimmer-adult	Helicopter	7.77E-08	1.26E+01	1.00E-03	2.57E+02	2.51E-07	7.14E-04	8.98E-03	1.00E+00	3.98E+06	1.11E+02	1.00E+02	1.11E+00
Diquat	Swimmer-child	Helicopter	7.77E-08	1.26E+01	1.00E-03	4.40E+02	4.30E-07	3.33E-03	4.19E-02	1.00E+00	2.33E+06	2.39E+01	1.00E+02	2.39E-01
Diquat	Swimmer-adult	Truck	7.77E-08	3.59E+00	1.00E-03	2.57E+02	7.18E-08	7.14E-04	2.57E-03	1.00E+00	1.39E+07	3.90E+02	1.00E+02	3.90E+00
Diquat	Swimmer-child	Truck	7.77E-08	3.59E+00	1.00E-03	4.40E+02	1.23E-07	3.33E-03	1.20E-02	1.00E+00	8.14E+06	8.35E+01	1.00E+02	8.35E-01

-- Receptor assumed to be exposed via drinking water; therefore, incidental ingestion is not evaluated.

NA - Not Available.

NC - Not Calculated (No dose-response value).

Dislufenzopyr is applied via ground methods only. Therefore, the Helicopter scenario is not evaluated.

Oral NOAEL is used to evaluate dermal contact with water.

Calculation: Potential Doses, Margins of Exposure, and Population Adjusted Doses
 Scenario: Public Receptors - Accidental Exposure - Spill and Direct Spray of Pesticide to Waterbody
 Pathway: Drinking Water Ingestion

Pesticide	Public Receptor	Accident Source	Typical Water Concentration (mg/L)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)	Drinking Water		Aggregate Risk Index
						PAD (mg/kg-day) Acute	%PAD (unitless) Acute	
Diquat	Angler	Helicopter	1.26E+01	2.86E-02	3.59E-01	7.50E-01	47.90%	2.09E+00
Diquat	Berry - adult	Helicopter	1.26E+01	2.86E-02	3.59E-01	7.50E-01	47.90%	2.09E+00
Diquat	Berry - child	Helicopter	1.26E+01	6.67E-02	8.38E-01	7.50E-01	111.78%	8.95E-01
Diquat	Hiker/Hunter	Helicopter	1.26E+01	2.86E-02	3.59E-01	7.50E-01	47.90%	2.09E+00
Diquat	N.American-child	Helicopter	1.26E+01	3.33E-02	4.19E-01	7.50E-01	55.89%	1.79E+00
Diquat	Berry - child	Truck	3.59E+00	6.67E-02	2.40E-01	7.50E-01	31.94%	3.13E+00

NA - Not Available.

NC - Not Calculated (No dose-response value).

Disflufenzopyr is applied via ground methods only. Therefore, the Helicopter scenario is not evaluated.