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# TASK 5. Development of Chemical/Physical Profile: Cyano (3-phenoxyphenyl)-methyl-4-chloro-alpha-(1-methylethyl)benzeneacetate; (PYDRIN)

Contract No. 68-01-5830

Final Report

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SUBMITTED TO:

Environmental Protection Agency
Arlington, Virginia 22202

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Cyano (3-phenoxyphenyl)methyl-4-chloro-alpha-(1-methylethyl) benzeneacetate; (PYDRIN)

1. Aqueous Degradation

Pydrin is stable to hydrolysis for 100 hours under acidic conditions at 75 C. The photolytic half-life on glass, silica, and soil are 30, 80, and 500 hours, respectively. Pydrin photodegrades in water with a half-life of about 500 hours.

2. Soil Degradation

Pydrin has a half-life of about 1 month in the field. In an aerobic soil study, 17% of the applied Pydrin is lost in 90 days.

3. Soil Mobility

No data are available on the soil mobility of Pydrin.

4. Accumulation

Pydrin does not accumulate ($\geq$0.01 ppm) in sugar beet (roots and tops), soybean (vines and beans), or sorghum (heads and stalks) when grown in rotation following Pydrin treated cotton crops. Pydrin residues accumulate in rainbow trout, with an accumulation factor of over 300.

Reference:

1. EPA registration file no. 6G 1755.