

VALUE(S) ADDED 7-24-85

FACT SHEET REVISED -----

VALUE(S) REMOVED -----

Date: July 26, 1984

Surface Water Quality  
Standard Documentation

Chemical: Demeton

C.A.S., No.(s): 8065-48-3, 298-03-3; 126-75-0

Basis (Human/Aquatic): Aquatic

Standard by Water Classification:

	<u>ug/l</u>	<u>Notes</u>
Classes AA,AA-s;A;A-s;B;C	0.1	J
Class D		
Classes SA;SB;SC;I	0.1	J
Class SD		

Remarks: None

Summary of Information

1. EPA. 1976. Quality criteria for water. EPA 440/9-76-023. USEPA, Wash., D.C. 256 pp.  
-criterion: "0.1 ug/l for freshwater and marine aquatic life."  
-based on persistence of its Acetyl cholinesterase inhibiting ability.  
-report a 96-hour LC<sub>50</sub> for Gammarus fasciatus of 27 ug/l.
2. Johnson, W.W. and M.T. Finley. 1980. Handbook of acute toxicity of chemicals to fish and aquatic invertebrates. USDOI Fish and Wildl. Serv. Resource Pub. 137, Wash., D.C. 98 pp.  
-report a 48-hour EC<sub>50</sub> for Daphnia pulex of 14 ug/l.

Standard Derivation

Multiplication of the D. pulex EC<sub>50</sub> by an application factor of 0.01 results in a criterion of 0.1 ug/l. This value agrees with the criterion recommended by EPA (1976). The standard of 0.1 ug/l should be adopted for all surface fresh and salt water classes except classes D and SD.