AMBIENT SURFACE WATER QUALITY
STANDARDS DOCUMENTATION

CHEMICAL: Diethyl phthalate

VALUE(S) ADDED 8-08-83

CAS NO.(s): 84-66-2

FACT SHEET REVISED 9-6-85

BASIS (Human/Aquatic): Human

VALUE(S) REMOVED _____

WATER CLASSIFICATION: AA; AA-s; A; A-s

STANDARD: 50 ug/l Note E

REMARKS:

SUMMARY INFORMATION:

Diethyl phthalate is a member of a class of compounds called phthalates (esters of 1,2-benzene dicarboxylic acid) which are used widely as plasticizers and are frequently found in the environment.

Available toxicity information on this compound has been reviewed.[1,2,3] Phthalate esters have been found to have a very low order of acute toxicity when administered orally to animals.[4] Insufficient data exist upon which to calculate a guideline based on chronic toxicity or aesthetic characteristics. The compound has not been adequately tested to determine its oncogenic potential. A study has reported[5] fetal malformations in rats exposed to high doses during gestation by intraperitoneal injection. The National Toxicology Program has established a comprehensive program to evaluate the chronic toxic potentials of phthalates.

STANDARD DERIVATION

Inadequate data base for this chemical precludes the use of any derivation outlined in Section 701.3 through 701.7. Therefore, the general guideline of 50 ug/l is recommended as a standard.

REFERENCES:

(1) USEPA, 1980, Ambient Water Quality Criteria Document for Phthalate Esters, PB81-117780.

(2) Autian, J., 1973, Environmental Health Perspectives, 3-26.

(3) USEPA, 1983, Phthalate Esters.

(4) Phthalic Acid Esters, 1980, Health and Welfare Canada, 80-EHD-62.

(5) Singh, A. et al., 1972, J. of Pharm. Sci., 61(1), 51-55.

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