

AMBIENT SURFACE WATER QUALITY
STANDARDS DOCUMENTATION

VALUE(S) ADDED

8-08-83

CHEMICAL: Guaifenesin

FACT SHEET REVISED 9-6-85

CAS NO.(s): 93-14-1

VALUE(S) REMOVED _____

EASIS (Human/Aquatic): Human

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

STANDARD: 50 ug/l

Note E

REMARKS:

SUMMARY INFORMATION:

Available toxicity information on guaifenesin has been reviewed.¹⁻⁵ Guaifenesin is a soluble powder widely used in cough medicines. Few adverse effects have been associated with its therapeutic use in children and adults at oral doses of 100 to 400 mg per day. Nausea, gastrointestinal upset and drowsiness are infrequent side effects. Data on the effects of chronic ingestion of sub-therapeutic amounts of guaifenesin in animals and humans are lacking. Insufficient data exist upon which to calculate a guideline based on chronic toxicity or aesthetic effects. The compound has not been adequately tested to determine its oncogenic potential.

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 the standard.

REFERENCES:

- (1) Champlon, L., et al., 1976, The effects of four commonly used drugs on platelet function, J. Pediatrics, 89(4), 653-656.
- (2) Giri, S., et al., 1972, Potentiating effects of chlorpromazine on the paralysis and toxicity induced by gualacal glyceryl ether in rats, Tox. Appl. Pharm., 23, 713-719.
- (3) Buchanan, G., et al., 1977, The effects of "anti-platelet" drugs on bleeding time and platelet aggregation in normal human subjects, Am.J. Clin, Path, 68, 355-359.
- (4) Buchanan, G., et al., 1978, Impairment of hemostasis in patients with severe hemophilia, JAMA, 240(20), 2173-2174.
- (5) Computer Search of National Library of Medicine (NLM) through 1984.