

AMBIENT SURFACE WATER QUALITY
STANDARDS DOCUMENTATION

CHEMICAL: Mercaptobenzothiazole

CAS NO.(s): 149-30-4

BASIS (Human/Aquatic): Human

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

STANDARD: 50 ug/l

Note E

VALUE(S) ADDED

8-08-83

FACT SHEET REVISED 9-6-85

VALUE(S) REMOVED

REMARKS:

SUMMARY INFORMATION:

Available toxicity information on mercaptobenzothiazole (MBT) has been reviewed.¹⁻⁴ The compound is a rubber vulcanization accelerator and its salts have been used as corrosion inhibitors, fungicides and bactericides. Unpublished studies, conducted in the early 1950's, reported no adverse effects in rats and dogs chronically exposed to 5,000 ppm in the diet;³ the details of these studies were not provided for review. Insufficient data are available upon which to calculate a guideline based on chronic toxicity or aesthetic characteristics. Although the compound has not been adequately tested to determine its oncogenic potential, a carcinogenesis bioassay sponsored by the National Toxicology Program is in progress and the standard may be modified once the results are available for review.

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) Eckardt, R. and Hindin, R., 1973, The health hazards of plastics, J. Occ. Med., 15, 808-819.
- (2) Mainprize, J., et al., 1976, The fate of benzothiazole-2-sulphonic acid in biologically treated industrial effluents, J. Appl. Bact., 40, 285-291.
- (3) Gosselin, R., et al., 1976, Clinical Toxicology of Commercial Products, 4th Ed., Williams and Wilkins Co., Baltimore, Md., p. 202-203.
- (4) Computer Search of National Library of Medicine (NLM) through 1984.

JS/pb DEC 84

SEP - 6 1985