



## Fact Sheet

# Ambient Aquatic Life Water Quality Criteria for Aniline

### AUTHORITY

Ambient water quality criteria are published pursuant to Section 304(a) of the Clean Water Act and may form the basis for enforceable standards if adopted by a State into water quality standards. The criteria reflect the latest scientific knowledge on the identifiable effects of pollutants on public health and welfare, aquatic life and recreation. They are developed using a process described in the "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses" (Stephan *et al.*, 1985).

### BACKGROUND

Aniline (aminobenzene, benzenamine, phenylamine) occurs naturally in coal tars and is manufactured through various chemical procedures. The major uses of aniline are in the polymer, rubber, agricultural and dye industries. Aniline is used to manufacture polyurethanes, antioxidants, antidegradants, vulcanization accelerators, and sulfa drugs. Aniline derivatives are used in herbicides, fungicides, insecticides, repellents, and defoliants. Aniline has also been used as an antiknock compound in gasolines. Aniline is the simplest of the aromatic amines ( $C_6H_5NH_2$ ).

### CRITERIA VALUES

Except where locally important species are very sensitive:

- \* Freshwater aquatic organisms and their uses should not be affected unacceptably if the four-day average concentration (i.e., chronic exposure) of aniline does not exceed 14 ug/l more than once every three years on the average and if the one-hour average concentration, (i.e., acute exposure) does not exceed 28 ug/l more than once every three years on the average, and

- \* Saltwater aquatic organisms and their uses should not be affected unacceptably if the four-day average concentration (i.e., chronic exposure) of aniline does not exceed 37 ug/l more than once every three years on the average and if the one-hour average concentration (i.e., acute exposure) does not exceed 77 ug/l more than once every three years on the average.

## IMPLEMENTATION INTO STATE STANDARDS

Ambient water quality criteria may form the basis for enforceable standards if adopted by a State into water quality standards. States may opt to develop site specific criteria (Water Quality Standards Handbook, December, 1983, EPA#: 440/5-83-011). Replacement of national criteria with site specific criteria may include site specific criterion concentrations, mixing zone considerations (Water Quality Standards Handbook, December, 1983, EPA#: 440/5-83-011), averaging periods and site-specific frequencies of allowed exceedences (Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses, Stephan et al., 1985). When the basis for site specific criteria relate to the averaging period, there should be a justification for why variability assumptions underlying national criteria are inappropriate.

## AVAILABILITY OF DOCUMENT

Copies of the proposed criteria document, and other referenced documents, may be obtained from the address below.

***Aniline Proposal  
Water Resource Center, (RC-4100)  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, D.C., 20460***

For further information please contact:

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