Date: July 28, 2006
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SECONDARY VALUES FOR ACENAPHTHYLENE (CAS No. 208-96-8)

A search was conducted (July 2006) for information on the chemical properties and toxicity of acenaphthylene to human health and to fish and aquatic life using the following databases and search engines: ECOTOX (toxicity to fish and aquatic life), IRIS (Integrated Risk Information System; toxicity to human health), and CHEMFATE (environmental fate).

FISH AND AQUATIC LIFE

The calculation of secondary values for fish and aquatic life requires, at a minimum, an acute value for one of three genera (*Ceriodaphnia*, *Daphnia*, or *Simocephalus*) in the family Daphnidae. Currently, there are insufficient data to calculate an acute secondary value for the protection of fish and aquatic life for acenaphthylene at this time.

HUMAN HEALTH

To calculate a criteria or secondary value for the protection of human health, it is first necessary to determine if the substance has been shown to be carcinogenic (which will result in the calculation of a human cancer criteria or secondary value) or not (which will result in the calculation of a human threshold criteria or secondary value). Acenaphthylene is currently classified as "D", not classifiable as to carcinogenicity, by the U.S. EPA (IRIS database) based on inadequate data from animal bioassays and no human data. While U.S. EPA considers acenaphthylene a Priority Pollutant, it has not recommended any water quality criteria (U.S. EPA 2002) for this substance. It is not possible to calculate human threshold criteria or secondary values for the protection of human health because there is currently no oral reference dose (RfD) available.