21-JUL-88

V. AQUIRE SUMMARY

Name Benzenamine, N,N-dimethyl-4-(phenylazo)-

CAS number 60-11-7

SPECIES	EFFECT	DURATION (DAYS)	E T	LIFE STAGE	CONC. (ug/l)	M U	REF NO.
POECILIA RETICULATA GUPPY	TMR	365.00	D	10-12 MO, FEMALE	30 MG %	U	8881
POECILIA RETICULATA GUPPY	TMR	392.00	D	ADULT, 10-12 MO	0.30MG/G	U	8174

REFERENCES:

REF. NUMBER: 8174
AUTHOR(S): PLISS,G.B. AND V.V.KHUDOLEY
YEAR: 1975
TITLE: TUMOR INDUCION BY CARCINOGENIC AGENTS IN AQUARIUM FISH
SOURCE: J. NAT. CANCER INST. 55(1):129-136

REF. NUMBER: 8881
AUTHOR(S): KHUDOLEI,V.V.
YEAR: 1972
TITLE: INDUCTION OF LIVER TUMORS BY SOME AZO COMPOUNDS IN AQUARIUM GUPPIES [LEBISTES RETICULATUS (PETERS)]
SOURCE: J. ICHTHYOL. (ENGL. TRANSL. VOPR. IKHTIOL.) 12(2): 319-324 (AUTHOR COMMUNICATION USED)

HAZARDOUS SUBSTANCE ECOLOGICAL FACT SHEET

U.S. Environmental Protection Agency
Office of Toxic Substances

Chemical Name: Dimethylaminoazobenzene
CAS Number: 60-11-7

GENERAL INFORMATION

Dimethylaminoazobenzene (p-dimethylaminoazobenzene) is a yellow crystalline solid used for the determination of free hydrochloric acid in gastric juice, in spot test identification of peroxidized fats, and as an indicator of pH. It is moderately soluble in water, and may enter the aquatic environment via effluents from chemical plants where it is manufactured, domestic waste treatment plant effluents, or spills.

ACUTE (SHORT-TERM) ECOLOGICAL EFFECTS

Acute or short-term ecological effects are severe effects upon aquatic animals or plants, such as death or complete immobilization, which occur following exposure to a chemical in water for a relatively short period of time, such as four days or less. Dimethylaminoazobenzene is considered to have moderate acute toxicity to aquatic life.

CHRONIC (LONG-TERM) ECOLOGICAL EFFECTS

Chronic or long-term ecological effects are generally subtle effects upon aquatic animals or plants, such as reductions in long-term survival, growth, or reproduction; or changes in appearance or behavior following exposure to a chemical in water for a sufficient period of time to include either a complete life-cycle or a significant portion of a life-cycle. Dimethylaminobenzene is considered to have moderate chronic or long-term toxicity to aquatic life.

DISTRIBUTION AND PERSISTENCE IN THE ENVIRONMENT

The chemical properties of dimethylaminoazobenzene indicate that, after a sufficient amount of time, it will tend to be distributed in the environment as follows:

air	0.20%
soil	32.48%
water	36.94%
suspended solids	0.05%
aquatic biota	0.02%
sediment	30.31%

Dimethylaminoazobenzene will probably be moderately persistent in aquatic ecosystems.

BIOACCUMULATION IN AQUATIC ORGANISMS

The concentration of dimethylaminoazobenzene in edible tissues of most aquatic species that are consumed by humans will probably be somewhat higher than the average concentration that was present in the water in which the organisms had been living.