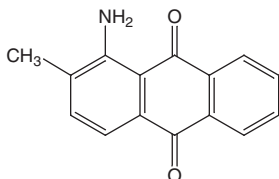


1-Amino-2-Methylantraquinone

CAS No. 82-28-0

Reasonably anticipated to be a human carcinogen
First Listed in the *Third Annual Report on Carcinogens* (1983)



Carcinogenicity

1-Amino-2-methylantraquinone is *reasonably anticipated to be a human carcinogen* based on sufficient evidence of carcinogenicity in experimental animals. Technical grade 1-amino-2-methylantraquinone, administered in the feed, induced hepatocellular carcinomas in rats of both sexes, and kidney carcinomas in males. The compound induced an increased combined incidence of hepatocellular carcinomas and neoplastic nodules in female mice (NCI 1978).

No adequate data were available to evaluate the carcinogenicity of 1-amino-2-methylantraquinone in humans (IARC 1982).

Properties

1-Amino-2-methylantraquinone is slightly soluble in carbon tetrachloride, and soluble in acetone, ethanol, ether, benzene, chloroform, and acetic acid. Its molecular weight is 237.3 and its melting point is 205°C to 206°C (IARC 1982, HSDB 2001).

Use

1-Amino-2-methylantraquinone is used almost exclusively as a dye and dye intermediate for the production of a variety of anthraquinone dyes (IARC 1982). It was used as a dye for synthetic fibers, furs, and thermoplastic resins (HSDB 2001).

Solvent Blue 13 and Acid Blue 47 are the only dyes derived from 1-amino-2-methylantraquinone that were produced in the United States. Solvent Blue 13 was last produced in 1947 and Acid Blue 47 was last produced in 1973 (IARC 1982).

Production

1-Amino-2-methylantraquinone is no longer produced commercially in the United States (HSDB 2001). U.S. production began in 1948 and ended in 1970 (IARC 1982). Three current suppliers were identified (Chem Sources 2001). The IARC (1982) stated that imports through principal U.S. customs were last reported in 1972, when 264 lb were imported into the U.S. (IARC 1982).

Exposure

The primary routes of potential human exposure to 1-amino-2-methylantraquinone are inhalation and dermal contact. The potential for occupational exposure was greatest among workers engaged in textile dyeing. The National Occupational Hazard Survey, conducted by NIOSH from 1972 to 1974, reported no information on 1-amino-2-methylantraquinone alone, but estimated that 6,400 workers have possibly been exposed to anthraquinone dyes (NIOSH 1976). Exposure is limited because 1-amino-2-methylantraquinone is no longer commercially produced in the United States (HSDB 2001).

Regulations

EPA

Emergency Planning and Community Right-To-Know Act

Toxics Release Inventory: Listed substance subject to reporting requirements

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