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SECONDARY VALUES FOR METHYL ISOBUTYL KETONE (CAS No. 108-10-1)

A search was conducted for information on the chemical properties and toxicity of methyl isobutyl ketone 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 Secondary Values

Only three usable toxicity data records were found for methyl isobutyl ketone in the ECOTOX database. Because no toxicity data are available for a Daphnid species, it is not possible to calculate acute or chronic secondary values for this substance. For reference, the three toxicity records available were LC50 values of 505,000, 540,000, 537,000 µg/L for the fathead minnow.

Human Health Secondary Values

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). Methyl isobutyl ketone is listed in EPA's IRIS database, but neither an oral reference dose (oral RfD) nor an oral slope factor are available. Therefore, it is not possible to calculate human threshold or cancer secondary values for this substance.