

## Methyl Ethyl Ketoxime (MEKO)

Methyl ethyl ketoxime (MEKO), also known as 2-butanone oxime or MEK-oxime, is an industrial antioxidant used as an antiskinning agent in paints. It is also used as a blocking agent for urethane polymers, as a corrosion inhibitor in industrial boilers, and can be found in some adhesives, caulking products and repair products that may be used by consumers. Because of the wide range of industrial and consumer uses for this chemical, one might expect exposures to both workers and consumers.

MEKO passed the animal data screen, underwent a preliminary toxicological evaluation, and is being brought to the Carcinogen Identification Committee for consultation. This is a compilation of the relevant studies identified during the preliminary toxicological evaluation.

### Epidemiological data

No epidemiological data were found for this compound.

### Animal carcinogenicity data

- Chronic inhalation studies in rats
  - A long-term carcinogenicity bioassay by whole-body inhalation in F344 rats: Newton *et al.* (2001)
- Chronic inhalation studies in mice
  - A long-term carcinogenicity bioassay by whole-body inhalation in CD-1 mice: Newton *et al.* (2001)

### Other relevant data

- Genotoxicity
  - Salmonella test for mutagenicity in presence of hamster liver S9 activating enzymes: NTP (1999)
  - Chinese hamster ovary cell test for sister chromatid exchanges in the presence of S9: NTP (1999)
  - Chinese hamster ovary cell test for chromosomal aberrations: NTP (1999)
  - *In vivo* micronucleus assay in erythrocytes of male and female mice exposed in drinking water for 13 weeks: NTP (1999)

## References<sup>1</sup>

Newton PE, Woodling WL, Bolte HF, Derelanko MJ, Hardisty JF, Rihehart WE (2001). A chronic inhalation toxicity/oncogenicity study of methylethylketoxime in rats and mice. *Inhal Toxicol* **13**, 1093-1116.

National Toxicology Program (NTP, 1999). NTP technical report on toxicity studies of methyl ethyl ketoxime administered in drinking water to F344/N rats and B6C3F1 mice. Toxicity report series No. 51, U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health.

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<sup>1</sup> Copies of these listed references, as either the abstract, the relevant sections of the publication, or the complete publication, have been provided to members of the Carcinogen Identification Committee. These references have been provided in the order in which they are discussed in this document.