## Hydrogen bromide

Supplement 2004

MAK value (1996) 2 ml/m<sup>3</sup> (ppm)  $\triangleq$  6.7 mg/m<sup>3</sup>

Peak limitation (2000) Category I, excursion factor 1

Absorption through the skin -

Sensitization -

Carcinogenicity –

Prenatal toxicity (1989) Pregnancy Risk Group D<sup>1</sup>

Germ cell mutagenicity –

BAT value –

Synonyms hydrobromic acid

Chemical name (CAS) anhydrous hydrobromic acid

CAS number 10035-10-6

In 1996 the MAK value for hydrogen bromide was set at 2 ml/m<sup>3</sup>; in 2000, exposure to peak concentrations was limited according to Category I with an excursion factor of 1. In 1989 the substance was classified for prenatal toxicity in Section IIc of the *List of MAK and BAT Values*, which was revised to Pregnancy Risk Group D in 2006.

When the hydrogen halide compounds were reviewed recently, it was checked whether any new data for hydrogen bromide have become available. There were no studies in the IUCLID database after 1996 (ECB 2000). A literature search for publications since 1996 yielded two new case reports of short-term exposure to hydrogen bromide in humans, but they did not contain any exposure data (Burns and Linden 1997; Orlando *et al.* 1997). Therefore, no new data for hydrogen bromide relevant to the evaluation has been published since 1996.

The MAK value, the Peak Limitation Category and the classification for prenatal toxicity in Pregnancy Risk Group D have been retained.

<sup>1</sup> The definitions of the pregnancy risk groups were revised with the *List of MAK and BAT Values 2006*.

*The MAK-Collection Part I: MAK Value Documentations, Vol. 26. DFG*, Deutsche Forschungsgemeinschaft Copyright © 2011 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim ISBN: 978-3-527-32306-7

## References

Burns MJ, Linden CH (1997) Another hot tub hazard. Toxicity secondary to bromine and hydrobromic acid exposure. *Chest 111*: 816–819

ECB (European Chemicals Bureau) (2000) *Hydrogen bromide*. IUCLID Dataset, 18.02.2000, ECB, Ispra, Italy

Orlando JP, de Haro L, Leroyer S (1997) Reactive airways dysfunction syndrome and bronchiolitis obliterans after exposure to acid vapors. *Rev Pneumol Clin 53*: 339–342

completed 03.02.2004