

# Tetraethyllead

## MAK Value Documentation, supplement – Translation of the German version from 2001

MAK Commission<sup>1,\*</sup>

<sup>1</sup> Permanent Senate Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area, Deutsche Forschungsgemeinschaft, Kennedyallee 40, 53175 Bonn, Germany

\* email: MAK Commission ([arbeitsstoffkommission@dfg.de](mailto:arbeitsstoffkommission@dfg.de))

### Keywords:

tetraethyllead, peak limitation, excursion factor

<b>MAK value (1994)</b>	<b>0.05 mg/m<sup>3</sup> (as Pb)</b>
<b>Peak limitation (2001)</b>	<b>Category II, excursion factor 2</b>
<b>Absorption through the skin (1966)</b>	<b>H</b>
<b>Sensitization</b>	–
<b>Carcinogenicity</b>	–
<b>Prenatal toxicity (1994)</b>	<b>Pregnancy Risk Group D</b>
<b>Germ cell mutagenicity</b>	–
<b>BAT value (1994)</b>	<b>25 µg diethyllead/l urine (as Pb), 50 µg total lead/l urine</b>
<b>CAS number</b>	<b>78-00-2</b>

Citation Note:  
MAK Commission.  
Tetraethyllead. MAK Value  
Documentation, supplement  
– Translation of the German  
version from 2001. MAK  
Collect Occup Health  
Saf. 2021 Dec:Doc902.  
DOI: [https://doi.org/10.34865/  
mb7800aeoj21\\_1ad](https://doi.org/10.34865/mb7800aeoj21_1ad)

## Peak limitation

The most sensitive target organ is the central nervous system. After long-term exposure (mean exposure  $0.085 \pm 0.034$  mg/m<sup>3</sup>), the substance led to an increased incidence of tremor at concentrations above 0.050 mg/m<sup>3</sup>, which increased in a dose-dependent manner (see Greim 2001). Irritation of the skin and mucous membranes was not described.

As the critical effect is a long-term effect and therefore dependent on the total exposure, an excursion factor of 2 is justifiable despite the small margin between the LOEL (lowest observed effect level) and the MAK value.

## Notes

## Competing interests

The established rules and measures of the Commission to avoid conflicts of interest ([https://www.dfg.de/en/dfg\\_profile/statutory\\_bodies/senate/health\\_hazards/conflicts\\_](https://www.dfg.de/en/dfg_profile/statutory_bodies/senate/health_hazards/conflicts_)

Manuscript completed:  
06 Dec 2000

Publication date:  
14 Dec 2021

License: This work is licensed  
under a [Creative Commons  
Attribution 4.0 International  
License](https://creativecommons.org/licenses/by/4.0/).



---

[interest/index.html](#)) ensure that the content and conclusions of the publication are strictly science-based.

## References

Greim H (ed) (2001) Tetraethyllead. MAK Value Documentation, 1994. In: Occupational Toxicants, vol 15. Wiley-VCH, Weinheim, 223–235. Also available from DOI: [10.1002/3527600418.mb7800e0015](https://doi.org/10.1002/3527600418.mb7800e0015)