

Tetrahydrofuran
C₄H₈O
[CAS No. 109-99-9]
OEL-C: 50 ppm (148 mg/m³) (skin)

Summary of OEL-C documentation

There are still insufficient data to identify the threshold level of tetrahydrofuran (THF) to induce health effects in humans. In animal experiments, Ohashi *et al.*¹⁾ observed effects on the respiratory tract membrane after repeated (3 weeks) exposure of rats at 100 ppm, the lowest level at which objective signs of THF health effects have been detected so far studied. Based on this observation, 50 ppm is proposed as the occupational exposure limit to prevent health effects

in humans. Carcinogenicity was observed in animal studies by NTP. The mechanism of the carcinogenicity however was considered not applicable to humans.

Year of Proposal (revision): 2015

Year of Proposal: 1978 (OEL-C 200 ppm)

References

- 1) Ohashi T, Nakai Y, Nakata J, Maruoka K, Ikeoka H, Horiguchi S, Teramoto K. Experimental studies on the effects of respiratory tract membrane after short-term exposure to tetrahydrofuran. I Effects on movement and morphology of cilia in nasal membrane. Sumitomo Sangyo Eisei 1983; 19: 106–12 (in Japanese).