

The Importance of Updates on Odour Detection Threshold Values For Pure Compounds

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ABSTRACT

This paper is a continuation of the previous publication on determination of odour detection thresholds values for pure chemicals. It is very important to update the odour detection threshold values (ODTV) for pure compounds since these values are often used for estimation of the emissions of the pure chemicals. We all agree that most of the data for ODTV developed before 2003 might be underestimated due to the several factors.

Before 1970, a common approach for determining odour threshold values was to smell a syringe filled with different chemical concentrations. This of course, was highly inaccurate, and did not rely on scientific analysis, but rather estimation. In the late 1970's when dynamic olfactometry was introduced, the new odour detection thresholds values were then developed based on a new dynamic olfactometry method. However, at that time it was unknown that the flows at the sniffing ports of the olfactometer play an important role in the evaluation process and therefore in the results. There is a need for an update on the odour detection threshold values. Previous paper covered estimation of the ODTV for 24 pure compounds. This time we extended a project.