

## Physico-chemical characterisation of material fractions in household waste - DTU Orbit (08/11/2017)

### Physico-chemical characterisation of material fractions in household waste: Overview of data in literature

State-of-the-art environmental assessment of waste management systems rely on data for the physico-chemical composition of individual material fractions comprising the waste in question. To derive the necessary inventory data for different scopes and systems, literature data from different sources and backgrounds are consulted and combined. This study provides an overview of physico-chemical waste characterisation data for individual waste material fractions available in literature and thereby aims to support the selection of data fitting to a specific scope and the selection of uncertainty ranges related to the data selection from literature. Overall, 97 publications were reviewed with respect to employed characterisation method, regional origin of the waste, number of investigated parameters and material fractions and other qualitative aspects. Descriptive statistical analysis of the reported physico-chemical waste composition data was performed to derive value ranges and data distributions for element concentrations (e.g. Cd content) and physical parameters (e.g. heating value). Based on 11,886 individual data entries, median values and percentiles for 47 parameters in 11 individual waste fractions are presented. Exceptional values and publications are identified and discussed. Detailed datasets are attached to this study, allowing further analysis and new applications of the data.

### General information

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