Emissions of additives from all goods containing plastic non-fibre polymers were based on estimates of total area for each plastic type and an empirical diffusion equation (OECD 2003) or a new equation based on a Piringer-type diffusion coefficient and convection mass transfer predictions. Below are further specifications of the algorithm given in conjunction to its place in the conceptual model's calculation hierarchy. Bracketed factors were not included in this first iteration of the calculations.

**First results**

Regardless of diffusion equation used the 8 substances with the highest emissions from the list of chosen additives are sorbitan monooleate, tribromophenol, dibromophenol, benzylibuthylphthalate, dibutylphthalate and di(n-heptyl)octyl-n-decylphthalate. All of these substances are to be expected due to their ubiquitous use and chemical properties. In general the OECD equation overestimates emissions 300-500 times (extreme is 10,000 times).

**On-going work**

The uncertainty is currently huge due to several factors. The diffusion model is e.g. under improvement based on empirical work. Furthermore are the total areas of polymers uncertain due to uncertain amounts of different polymers and their thicknesses in various goods. The amount of unbound additive in materials is another considerable uncertainty. However these and other uncertainties will be brought down during the development of the model and its database, which include further work based on case-studies and the on-going refined identification of additives in the materials and their amounts.