

An in vitro method to predict acute lung toxicity due to pulmonary surfactant inhibition

The overall aim of the project is to reduce the number of animal experiments related to consumer product safety assessment. This aim will be reached by developing an in vitro model based on pulmonary surfactant inhibition, allowing a broad range of chemicals and consumer products to be investigated for toxic effects on the pulmonary surfactant system and thereby their potential to induce acute lung toxicity.

To validate the quality and reliability of the in vitro model (based on sensitivity, specificity, precision and negative predictive value), a limited number of mouse inhalation studies must be carried out.