



Dr. Derek J. KNIGHT

Professional Background

Dr Derek J Knight (British) is the Senior Scientific Advisor to the Executive Director of the European Chemicals Agency (ECHA). For almost 18 years he headed a team of regulatory affairs professionals at a UK contract research organisation, specialising in safety assessments of chemical and biocides, but also covering a wide range projects for many regulatory schemes worldwide. Before this he registered medicinal products and worked as a technical support chemist for a UK pharmaceutical manufacturer. He has gained a broad understanding of the regulation of chemicals from the perspective of the various interested parties. He is especially interested in approaches to hazard and risk assessment using non-standard data. He is a Fellow of the Royal Society of Chemistry, a Chartered Scientist and a Fellow of The Organisation of Professionals in Regulatory Affairs. His doctoral studies at the University of Oxford in the UK were in organosulphur chemistry.

Abstract REACH and Natural Ingredients in Perfumes and Cosmetics

This former EU chemical control scheme was revised by the new scheme for Registration, Evaluation and Authorisation (REACH) of Chemical Substances. The REACH Regulation came into force on 1 June 2007 and the scheme began operating on 1 June 2008. Substances manufactured or imported into the EU at 1 tonne per annum have to be registered with the European Chemicals Agency (ECHA) in Helsinki.

The registration dossier contains technical information on the registrant and substance identity and use, a summary of the safety data, the dangerous classification and her animal testing was conducted, and any proposals for further testing. The safety data needed depend on the manufacture or import volume, and there is the opportunity to make use of existing information and predict the properties using an intelligent approach to safety evaluation. There is a review programme for existing substances with priority given to high tonnage substances and those with certain hazardous properties. A Chemical Safety Report (CSR) is required for substances registered at 10 tonnes per annum, which includes a risk assessment for human health and the environment for all the stages in the life cycle in the EU.

Although non-dangerous natural substances are exempt, chemical modification or treatment that results in a change of composition means that the substance is subject to registration. Many natural ingredients of perfumes, cosmetics and toiletries are therefore covered by REACH, although in the CSR only the environmental risk assessment has to be included as the human health risk assessment is assumed to be compliance with the EU Cosmetics Directive. Many natural substances are complex mixtures, referred to as unknown or variable composition, complex reaction products or biological materials (UVCB), so there can be practical challenges in assessing their properties.