

Here is a review of science publications from Euro Chlor in 2006. There are links to download them directly from *Chlorine Online*. If, however, you wish to receive hard copies, please e-mail your request to eurochlor@cefic.be.

OVERVIEW OF 2006 PUBLICATIONS

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- [Science Dossier](#): 'Long-range transport of chemicals in the environment'. This topic (LRT) attracts the attention of scientists, NGOs, the press and the public because chemicals not only remain at their place of origin, but can sometimes reach thousands of kilometers away. The [report](#) by Dr. James Franklin reviews the scientific literature on how natural and man-made chemicals are transported to remote locations, time-scales involved, mathematical models simulating environmental distribution and many other aspects such as the international regulatory agreements on LRT.
- [Marine Risk Assessments](#) have been produced for a number of chlorine-related chemicals to help improve our understanding of risks to the marine environment, particularly in the OSPARCOM North Sea region. In the course of 2006 two substances were added to the 25 already completed:
 - [1,1- Dichloroethylene](#)
 - [Monochloromethane](#)
- [FOCS](#) (Focus on Chlorine Science)

This is a new series initiated in 2005 to succeed Key Science Information Sheets ([KSIS](#)). It covers science issues aiming to clarify in a relatively simple way research in the field of chlorine chemistry. Two FOCS were published in 2006:

- [Risk assessment and cycling of natural organochlorines](#) (SETAC special symposium)
- [Life Cycle Assessment \(LCA\)](#).
- Two peer-reviewed papers were published (reprints can be requested):

'1,2,4-trichlorobenzene marine risk assessment with special emphasis on the Osparcom region North Sea', D van Wijk et al., 2006, *Chemosphere* 62:1294-1310.

This paper addresses the risks to the marine environment and summarizes many data on the substance, including a detailed analysis of the **P**ersistence, **B**ioaccumulation and **T**oxicity properties, demonstrating that these do not meet the generally accepted PBT criteria.

'A perspective on the environmental risk of halogenated by-products from uses of hypochlorite using a whole effluent toxicity based approach', Johnson et al, 2006, *Env. Toxicol. And Chem.*, 25,4:1171-77.

This paper reviews the results of a comprehensive whole effluent toxicity based approach to assess the formation of halogenated chlorination by-products from the use of hypochlorite. The comparative tests carried out on a worst-case effluent demonstrated that the current applications of hypochlorite do not produce additional toxicity, persistence and bioaccumulating by-products. The results are discussed in the context of the overall risk assessment for sodium hypochlorite.

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