



1 *Investigation of plasticizer substitutes for dibutyl phthalate.*

SUBSTITUTION OF REACH CRITICAL SUBSTANCES

More and more substances are being included in the “restricted list” of the REACH Regulation, including some that are regularly used in commercially available applications. The Fraunhofer ICT offers support in the search for substitutes, ranging from general characterization to application-oriented testing.

Fraunhofer Institute for Chemical Technology ICT

Joseph-von-Fraunhofer-Strasse 7
76327 Pfinztal
Germany

Contact

Dr. Jutta Böhnlein-Mauß
Phone +49 721 4640-215
jutta.boehnlein-mauss@ict.fraunhofer.de

www.ict.fraunhofer.de

The REACH Regulation (Registration, Evaluation and Authorization of Chemicals) entered into force on 1 June 2007, as a pan-European chemicals legislation. In accordance with this regulation, substances raising particular concern are first placed on a candidate list (SVHC list, substances of very high concern) and may then, if additional selection criteria are met, be included in the list of substances subject to authorization (Annex XIV). After their sunset date, substances in Annex XIV of the REACH Regulation require a temporary and cost-intensive authorization before they can be produced, placed on the market or used in the EU. The list of substances subject to restrictions currently includes various phthalates and chrome (VI) and lead compounds

that are regularly used in commercially available applications. These substances will therefore need to be replaced with suitable alternatives.

The Fraunhofer ICT provides support in the search for substitutes. The suitability of the substitutes for a particular application can be assessed according to their chemical-physical properties, the available toxicological data, and through basic investigations and application-oriented tests. At the Fraunhofer ICT, comprehensive analytical methods for material characterization and various processing units are available (mixing and kneading units, extrusion presses, extruders, presses), in order to test potential substitutes in formulations under near-operational conditions