

Session VI: Regulatory Compliance

Ecological Compliance in Synthetic Organic Dyes - New Challenges



Dr. Pankaj Desai R&D Head,Colourtex Industries Pvt. Ltd.

Dr. Pankaj D. Desai is Head of Research & Development at Colourtex Industries Private Limited, the Indian dyestuffs manufacturer based in Surat. After completing his doctorate in dyestuffs from UDCT, Mumbai (currently ICT), Dr. Pankaj joined Colourtex Industries Pvt. Ltd. in 1994 and has since been actively involved in R&D activities and technical matters at Colourtex. He possesses 24 years of rich experience in the field of dyestuff research and development. He is an active member and treasurer of Indian Operating Committee of ETAD, Convener of working group of Bureau of Indian Standards (BIS) committee for Dyes & Intermediates and Member of District Disaster Management Group. He has filed fifteen patents and presented papers on a very wide variety of topics in national and international seminars and conferences. Dr. Desai is involved in the development of dyes suitable for SCF dyeing technology and has developed complete range of dyes-CORANGAR PE- suitable for SCF dyeing technology for polyester and CORANGAR PA- dyes suitable for SCF dyeing technology for polyamide fibres.

Abstract

Today, 'sustainability', 'being eco-friendly' and 'green products' are very commonly used words and terminologies in industries as well as the electronic media.

The last decade has seen a significantly increased environmental awareness amongst consumers mainly on account of very wide coverage of environmental issues in the media. Consumers are also concerned about the adverse impact of industrial pollution on the environment and human health.

This concern is not limited to manufacturing processes and emissions but also to the environmental impact resulting from the use and eventual disposal of products. This life cycle perspective has resulted in restrictions on harmful substances and manufacturing processes. As a result, regulatory pressures have restricted some of the traditional synthetic organic dyes and some others are facing problems with respect to critical impurities generated during their manufacture as well as the manufacture of intermediates that are used to make these.

On the one hand the global dyes and intermediates industry is facing tremendous challenges with respect to environmental compliances of restricted substances whereas on the other academia and research institutes are engaged in advanced research on colorants for digital displays, liquid crystals and medicinal applications.

This presentation highlights the most critical issues arising on account of new ecological and toxicological requirements in the textile industry that significantly affect some of the most important and widely used commercial dyestuffs and suggests how academic research institutes can help industries to develop sustainable solutions.