

The abbreviation REACH stands for:

= Registration

= Evaluation

= Authorisation of

= Chemicals

Tilman Goerttler Environment, Health, Safety



Surely many readers of Screen News have run across the word "REACH". In this article we want to explain in short, what REACH means for our customers.

REACH is a European regulation (Regulation (EC) No. 1907/2006). This regulation is a completely new legislation about handling of chemical substances within the European Union. REACH became effective July 1st 2007.

The purpose of this regulation is "to ensure a high level of protection of human health and the environment".



All chemical substances in the market of the European Union have to be registered during the next couple of years. Comprehensive registration documents (like Chemical Safety Report) have to be sent to the newly found European Chemicals Agency (ECHA) in Helsinki, Finland. The novelty is, that the chemical industry is responsible to obtain all necessary data about the hazards of each individual substance and send it to the authorities. The agency (ECHA) will give a registration number to each registered substance.

#### Is it necessary to register screen and pad printing inks, hardeners, thinners, additives, etc.?

No.

It is possible to register substances only. Printing inks, hardeners, thinners etc. are not substances, but preparations. Coates Screen Inks GmbH buys preparations and also substances used for the manufacture of printing inks, hardeners, thinners etc.

#### Who must register?

#### Manufacturers and importers.

According to REACH a "manufacturer" is the producer of the chemical substance (like n-butylacetate). Being a printing ink manufacturer Coates Screen Inks GmbH is defined as a "downstream user". We do not manufacture substances ourselves, we process substances and preparations for the production of printing inks etc. According to REACH companies importing substances from Non-European countries (e.g. China) to Europe are defined as "importers".



#### COMMUNICATION ALONG THE SUPPLY CHAIN Substances / Printing Ink / Printing Ink / preparations and Additives and Additives and information Information Information (SDB)\* (SDR)\* (SDR)\* Printed Product Downstream Downstream Raw material user user Retailer manufacturer (industrial or Consumer importer professional user) **Coates Screen Inks** (registrant) Printer Information Information Information about use about use about use and and and exposure exposure exposure \*SDS = safety data sheet **OBLIGATION ACCORDING TO REACH**

# What does this mean for screen and pad printers?

All products (printing inks, additives etc.), supplied by Coates Screen Inks are subject to REACH as they are produced using chemical substances.

As defined by REACH the printer is an "industrial" or "professional" user. In general the consumer has to inform his supplier (e.g. Coates Screen Inks GmbH) about the use of the product. This so-called "identified use" has to be reported along the supply chain to the manufacturer of the substance (supply chain upwards).

This however, is in theory. At present we assume that it will be sufficient if Coates Screen Inks GmbH notifies the suppliers of the use like this: "The substance n-butylacetate is used for printing

inks. Please consider the intended use "printing ink" when registering n-butylacetate". This is to anticipate misuse: A customer uses printing ink to paint the wall, for example. That would be a "not identified use". Registration of substances is only made for identified uses. In addition the supplier Coates Screen Inks GmbH could ask the customers (the printers) to supply exposure data. Possible questions with reference to exposition could be: which amount of solvents is contained in the air at printer's workplace and for which time?

Which impact on environment occurs during correct handling of solvents? At the moment Coates Screen Inks GmbH does not assume that this will be necessary. Coates Screen Inks has own exposure data, which can be transferred to conditions in printing shops.

## Are there new safety data sheets?

#### Yes.

With the introduction of REACH safety data sheets have changed. The order of chapter 2 and 3 was switched. This was only a formal alteration. "Old" safety data sheets may still be used, as long as there are no major changes in content (e.g. other dangerous substances classification). Coates Screen Inks GmbH has already modified all safety data sheets to REACH format. The safety data sheet keeps on being an important information document for our customers. In the future safety data sheets will be even more comprehensive as registration numbers, so-called "exposure scenarios" and risk management measures will have to be listed as well ("extended safety data sheet").



#### Will all products of Coates Screen Inks GmbH be available in future?

#### That is a crucial question.

Generally our products are preparations consisting of several substances. It cannot be completely excluded that one or the other substance will disappear from the market of the European Union because its extensive registration process will exceed its economic profit. This mainly applies to substances with a low demand or substances which will be restricted by ECHA for trade and use.

#### Which substances will be restricted?

#### Substances of very high concern (SVHC).

They have to be authorised. Such substances are

- carcinogenic, mutagenic and toxic for reproduction substances of category I or II (CMR-substances, Cat. I and II),
- persistent, bioaccumulative and toxic substances (PBT-substances)
- very persistent and very bioaccumulative substances (vPvB-substances)
- substances of probable serious effects to human health or the environment

All these substances are not used by Coates Screen Inks GmbH, neither as pure substance nor as component of a preparation.

#### **Dates and** deadlines.

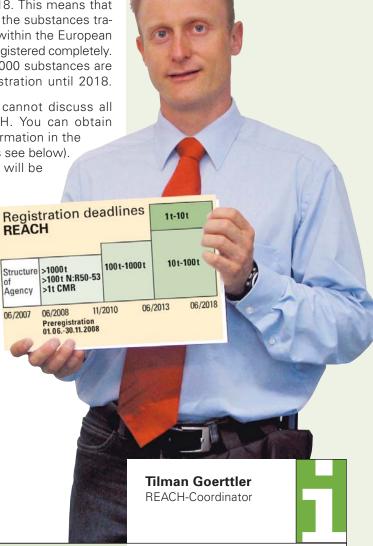
#### Rome was not built in a day.

First there is the period of preregistration for manufacturers and importers (period from June 1st to December 1st 2008). Data requirements are sparse and manufacturers and importers have to preregister to make use of the transition periods for registration. These deadlines are scaled according to yearly production in tons of the individual substances per registrant and according to the hazards to man and environment (see restricted substances). Deadlines for registration at the agency (ECHA) will be in 2010, 2013 and then 2018. This means that no later than 2018 the substances traded or processed within the European Union have to be registered completely. Approximately 30.000 substances are expected for registration until 2018.

This short article cannot discuss all aspects of REACH. You can obtain more detailed information in the internet (addresses see below). Or contact us, we will be happy to help you.

### 66 REACH

is a big task for all involved in the supply chain. Coates Screen Inks GmbH is working on this for the benefit of all customers and the environment. 66



#### **FURTHER INFORMATION:**

**European Chemicals Agency** 

www.echa.europa.eu

Helpdesks of national authorities example:

www.baua.de

helpdesks of industry associations

www.vci.de

Responsibility at Coates Screen Inks GmbH: Safety data sheets, hazardous substances, labelling, product safety.

+49 911 64 22-253 +49 911 64 22-209

tilman.goerttler@sunchemical.com