

## Information on the use of chromium trioxide for the manufacture of rotogravure printing cylinders and embossing forms



Chromium trioxide is a starting material for galvanic chrome plating and as such it plays a central role for the production of rotogravure printing cylinders and embossing forms. After engraving into relatively soft copper, the sensitive structure must be protected against wear and damage with a thin chromium coating.

The metallic chromium coating which has been applied to the finished cylinder is entirely non-hazardous due to its chemical structure and it can also be used without any reservations by our customers in the future. Our modern production facilities ensure already today that the expected stricter environmental regulations will be fulfilled. Thus uncoupled from legislative changes, we are a reliable supplier for our customers and make an active contribution to environment protection.

### REACH

In April 2013 the substance chromium trioxide which is essential for chrome plating was incorporated in the annex of the EU Regulation REACH by the European Commission. Presently, the use of chromium trioxide is exceptionally allowed for printing and embossing applications within the European Union provided that the applicable limits and regulations are observed. This derogation is still formally valid until September 2017. Currently, the extension is being discussed.

Besides several suppliers, ERA (European Rotogravure Association), in close cooperation with SWG Frankenberg and many other companies, is also seeking this extension for the rotogravure printing industry. In all likelihood, it will be approved for our branch since the chrome plating process in rotogravure printing and for embossing forms is far more progressive and safer regarding the environment and occupational safety than in other similar industries.

### SWG Process

In production chromium trioxide is used only in a closed system within SWG Frankenberg. The delivered printing and embossing forms no longer contain chromium trioxide but the non-hazardous metallic chromium. That means, chromium trioxide is only relevant for the production process and it does not leave our company.

By using state-of-the-art production technology and stringent controls we ensure that we remain well below the current and future limits already today. Concurrently, we develop and test various alternatives to the common chrome plating process in cooperation with research institutes and industrial partners.



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