Packaging & Narrow Web Technical Review

03.02.2016

Sheetfed

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Sheetfed Printing Inks of Flint Group – Thoughts to Environmental Aspects

Although no industrial product, for the production of which energy and raw materials will be used, can be called "non polluting" or "environmentally friendly" however, it is possible, to minimize the effects on the environment by a lot of individual measures. For the sheetfed offset inks of Flint Group this happens by optimization of environmental aspects during the whole 'life circle' of the inks.

When choosing the raw materials it is binding to fullfill the prescriptions of the EUPIA exclusion policy (<u>www.eupia.org</u>,) and not to use the harmful raw materials mentioned there in our inks and printing aids. For saving of resources it will be appreciated that a high share of renewable raw materials will be used directly or indirectly as pre product for resins and thinners. And at last it will be achieved that the inks have to be formulated in the way that these will be free of labelling according to the actual regulations.

Because of the share of responsibility for the used raw materials at qualification of our raw material suppliers it will be tested, if – besides a quality safety system – an accepted system is existing for optimization of environmental relevant impacts.

The production of sheetfed offset inks of Flint Group takes place in modern, fully automatic plants. So the energy consumption of electricity, heating oil and gas will be reduced to a minimum. CO₂ emissions during production of printing inks are 178 g per kg of ink (average value determined by the German Association of Paint Printing Ink Industry). Waste material quantities caused by production could be reduced to a minimum and emissions in air, water or soil don't occur. Besides our systems for quality management and occupational safety all production sequences will be tested regularly according to the prescriptions of the "environment protection standard" ISO 14001.

As the choice of packaging materials also has consequences on the environment, our sheetfed offset inks either will be supplied in returnable containers or in one way containers for which accepted ways for substantial recycling will exist.

Also after use of prints requirements for the protection of environment have to be considered. Therefore the formulation of the inks has to make sure that the inks don't disturb the subsequent recovered paper recycling. For this since decades we are in constructive dialog with the paper industry.

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Even if disposal or composting are not the recommended way to get rid of old prints, it is known, that prints on paper are biodegradable sufficiently for these procedures.

Eco analyses of printed objects show, that the influence of inks on the environment relevance of the print is minute. However, the most important raw material classes and the formulation variances have been submitted to so called eco efficiency analyses. Clues for essential environment deficits of the ink formulations didn't result therein. It is interesting, that such investigations don't classify vegetable oils "more environmentally friendly" than mineral oils. Decisive here is the energy need of agricultural activity and the use of fertilizers and pesticides.

These considerations show that with sheetfed offset inks of Flint Group environmental aspects will be accounted for in good way.

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