## Packaging & Narrow Web Technical Review

03.02.2016

Sheetfed

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## **BIO-inks for Sheetfed Offset Printing**

Sheetfed offset-inks are preparations from different raw materials. The main components are pigments as colorants, binders and additives. The most important working processes during ink production are solution-, dispersion-, mixing- and homogenising-processes. At Flint Group the choice of the raw materials for the production of offset inks is done in a way that besides the technical requirements also environmental and labelling aspects are considered.

Basically it can be stated that since times all standard sheetfed offset inks contain considerable parts of materials, which are based on renewable resources. Wood resin (rosin, colophony) should be mentioned as essential component of the hard resins and vegetable oils, like linseed oil or soy bean oil, which either are used in pure form or chemically modified as alkyd resin or fatty acid alkyl ester.

So for each Standard sheetfed offset ink statements like "on the base of renewable resources" or "on the base of vegetable oils" are possible and correct.

The binder of our inks with the affix "BIO" in the product name exclusively contains materials, which are based on renewable resources:

Novastar<sup>®</sup> F 908 LOW TACK BIO Novavit<sup>®</sup> F 918 SUPREME BIO Novavit<sup>®</sup> F 950 PLUS BIO Novavit<sup>®</sup> F 900 EXTREME BIO Novaboard<sup>®</sup> C 990 PROTECT BIO Novavit<sup>®</sup> F 940 LIBRA PLUS BIO Novavit<sup>®</sup> F 1000 WIN BIO F 960 VISION PLUS BIO Novavit<sup>®</sup> BCS BIO INTENSIVE Novavit<sup>®</sup> BCS BIO ND/NA Novaboard<sup>®</sup> BCS BIO INTENSIVE Novavit<sup>®</sup> EASY MIX BIO Novavit<sup>®</sup> ECO MIX BIO Novaspot<sup>®</sup> BIO

Generally the content of mineral oils in these series originating from the raw materials is no more than 1 %.

As member of the European Printing Ink Association (EuPIA) we have placed an obligation, to choose our raw materials according to the EuPIA exclusion policy (www.eupia.org) and to disclaim the toxic and harmful materials mentioned therein.

Our standard sheetfed offset printing inks so usually don't have to be labelled with hazard According to regulation (EC) No 1272/2008 of the European parliament and of the council of 16 December 2008 on classification, labelling and packaging of substances and mixtures standard sheetfed inks normally don't have to be labelled with a hazard pictogram.

Furtheron we confirm, that in sheetfed inks of Flint Group no toxic heavy metals as lead, arsenic, cadmium, selenium, antimony, mercury and chrome (VI) are used as constitutional raw materials.

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