

Flint Group Sheetfed – Our Environmental and Social Responsibility!

Through our uncompromising integrity policy and strong ethical values rooted in our own Mission and Guiding Principles, our customers can rely on us for continuous sustainable development.

For a full explanation of the Flint Group sustainability commitment and code of conduct, please visit our web site at www.flintgrp.com

Sheetfed Perspective - General Criteria

Delivering safe and compliant products and services to our customers is at the core of Sheetfed's sustainability journey. We ensure that we always proactively place our processes and products ahead of any official guidelines and beyond customers' expectations.

Flint Group is a founding member of the European Printing Ink Association (EuPIA) and holds a trusted position on the Leadership Council. EuPIA is a voluntary organisation made up of over 80 ink manufacturers that gives guidance on safe manufacturing, use and handling of printing inks and related products, based on experience, joint committees and close working relationship with legislators and industry experts. It provides a framework for its members to cooperate and thus ensure sustainable business, taking a proactive approach on health, safety and the environment. In the absence of legislation EuPIA sets out guidelines for its members to produce inks and coatings to standards higher than any official guidelines. As a member of EuPIA we fulfil many obligations in terms of the raw materials we use globally, best practice in manufacturing and the principle of placing consumer safety first. Our policy is to buy from raw material suppliers who apply an accepted system for optimisation of environmental relevant impacts (e.g. ISO 14001).

Our choice of raw materials therefore is made under the prescriptions of the EuPIA exclusion policy (www.eupia.org). This means that we do not use any of the harmful raw materials mentioned in that list.

As a general policy and as a member of EuPIA Flint Group always unconditionally commits to compliance with all relevant national and European legislation and the resultant legal requirements. We in Flint Group Sheetfed take this responsibility extremely seriously and have worked tirelessly to ensure our products and services always exceed any health and safety advice or regulations that exist.

- Legislation / REACH / SVHC

All Flint Group sheetfed products are produced under compliance with local laws, regulations and standards. All obligations of the European REACH⁽¹⁾ legislation have been fulfilled by Flint Group since it became effective in 2007 and obligations of this or other relevant legislation will also be complied with in the future.

Substances of very high concern (SVCH)⁽²⁾ are not contained in Flint Group's Sheetfed products as intentionally added compounds and the quantity brought in by raw materials falls below 0.1%.

- Environmental Proceeding and Energy Consumption

We continue our efforts to reduce energy consumption, emissions and waste. For this purpose, all our production sites for sheetfed products are tested regularly according to the prescriptions of the "environment protection standard" ISO 14001 and ISO 50001 "Energy Management".

This includes highest environmental standards and keeping transportation distances to customers as short as possible.

- Packaging

Our sheetfed products are supplied in returnable containers, or in one way containers which are recyclable.

Sheetfed Perspective - Ink Products Criteria

- BIO Formulae

When we add the suffix "BIO" to our ink nomenclature it means the formula is mineral oil free according to the EuPIA-definition: (mineral oil is not intentionally added, and the content < 1 % = 'BIO'-formulation)

- GHS⁽³⁾ Hazard Statements

Most of our conventional offset inks do not have any H-Phrase (Hazard Statement) classification, according to the CLP Regulation⁽⁴⁾ which came into force in 2016. For example almost all of our ink formulations are Cobalt free since it was discovered that Cobalt compounds are hazardous substances which can induce asthma-like attacks when breathed-in by humans. They can also cause skin allergies, eye, nose and throat irritation. Thus six years ago we accepted full responsibility to ensure the uncompromised safety of our workers and our customers to offer the best available safe system to the market place, based on technology, the environment, legislation etc. in order to fulfil eco certification.

- VOCs

None of our sheetfed inks contains VOCs⁽⁵⁾ (according to EU definition: any organic compound having at 293.15 K a vapour pressure of 0.01 kPa or more)

- Energy Curing Inks and Varnishes

As a member of EuPIA Flint Group strictly follows the rules of EuPIA's exclusion policy. Thus we voluntarily resign from using some raw materials that are known to perform well, due to their CLP-classification which interferes with the EuPIA exclusion policy, in order to offer best performing products at a competitive cost and lowest possible health risk. For example some LED and Low Energy curing inks may contain raw materials that have been classified by some suppliers and governmental agencies, under GHS as being reproductive toxicants. These materials would typically be categorised under GHS as "Toxic to reproduction", Category 1A and 1B and would carry the phrase "May damage fertility or the unborn child"(H360) on both the Safety Data Sheet and the label. An example of one such raw material is the photoinitiator, 2-Methyl-1(4-(methylthiophenyl)-2-morpholinopropan-1-one (CAS # 71868-10-5 / EC 400-600-6). This particular photoinitiator has excellent curing capabilities along with a synergistic effect, when used in conjunction with other photoinitiators used in LED and LE inks. Significantly, it is also very cost competitive, especially since it came out of patent protection a number of years ago.

In an effort to mitigate some of the hazards associated with this chemical, Flint Group has invested substantially in R&D, to develop and manufacture UV & EB technology that achieves best product performance, at a competitive cost and provides a safer alternative for our customers.

- Why is this important?

Fulfilling these criteria means that Flint Group Sheetfed can offer inks meeting the needs of the various Safety Standards Agencies around the globe:



EU Ecolabel: The EU Ecolabel is part of a broader EU Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy adopted by the European Commission which also links the EU Ecolabel to other EU green policies



Blue Angel: (UZ 14 - recycled paper / UZ 72 - Printing and Publication Papers / UZ195 - Printed Matters). The Blue Angel is the environmental symbol of the German Federal Government for the protection of man and the environment. If you use products or services using the Blue Angel environmental label, you can be sure to do something good for yourself, the environment and the future.



Nordic Ecolabel – (Nordic Swan) Is an effective and simple guarantee that products have fulfilled stringent environmental and climate criteria. It symbolizes work towards a sustainable consumerism and production, which are key factors in achieving a sustainable society.



Austrian Ecolabel (UZ 24): The label is carried only by those that are proven to be environmentally compatible products and which additionally exhibit a suitable fitness for use (quality). In this way the Ecolabel guarantees a high environmental standard without having to fear the loss of quality or safety.



Heidelberg Saphira Eco: Heidelberg's line of eco-friendly consumables for pre-press, press and post-press. Products carrying the Saphira Eco label meet or even exceed environmental standards while ensuring top production results.

Nestlé Quality Requirements: Outlines a whole range of quality, compliance and audit processes that a vendor must meet to be authorised to supply Nestlé



Cradle to Cradle Certification: The Cradle to Cradle Certified™ Product Standard guides designers and manufacturers through a continual improvement process that looks at a product through five quality categories — material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness.

For further information about Flint Group Sheetfed Products and our commitment to sustainability and consumer health please contact sheetfed@flintgrp.com

Notes:

1 REACH is a European Union regulation concerning the Registration, Evaluation, Authorisation and restriction of Chemicals. It came into force on 1st June 2007 and replaced a number of European Directives and Regulations with a single system. Among its many aims it endeavours to provide a high level of protection of human health and the environment from the use of chemicals.

2 A substance of very high concern (SVHC) is a chemical substance (or part of a group of chemical substances) for which it has been proposed that the use within the European Union be subject to authorisation under the REACH Regulation.

3 Hazard statements form part of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). They are intended to form a set of standardized phrases about the hazards of chemical substances and mixtures that can be translated into different languages.

4 The CLP Regulation adopts the United Nations' Globally Harmonised System on the classification and labelling of chemicals (GHS) across all European Union countries.

5 Volatile organic compounds (VOCs) are organic chemicals that have a high vapor pressure at ordinary room temperature. VOC emissions to the outdoors are regulated to prevent the formation of ozone.