INK, HEART & SOUL

SIEGWERK

Customer Information

Copper and zinc in printing inks

The printing ink industry uses copper metal and copper/zinc alloy (brass) metal, as well as copper and zinc compounds for certain relevant purposes.

Major pigments, and some few additives, are based on copper and zinc.

In particular, all Cyan, Green and Reddish Blue inks, and some Pink and Violet inks, which are sold by the printing ink industry contain up to 3% copper.
The Cyan shade of halftone printing is based imperatively on copper-organic phthalocyanine pigments.
"Gold bronze" metal inks are based on brass (copper/zinc alloy) pigments, thus contain up to 20 - 35% copper/zinc.

Copper and zinc salts and compounds are potentially hazardous if, depending on their solubility, they would be released into the environmental compartments soil and water and become bioavailable in a way they could affect organisms.

As a rule, printing inks are processed by the printing industry under conditions that do not bring about such releases[1].

With regard to printed matter, considering the minute quantities that printed layers represent, the following can be stated. Current state-of-the-art recycling and waste processing operations, as well as waste treatment and disposal processes do not bring about significant emissions to the sensitive compartments soil and water[2].

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[1] The only exception are water based inks where due to cleaning operations a certain small portion is transferred to waste water. In this case, depending on the waste stream and local regulatory thresholds for copper and zincconcentrations in waste water, it might be necessary to investigate.
[2] If inks are intended for compostable packaging, inks containing copper and zinc must be restricted. Information can be found in our Customer Information "Suitability of Siegwerk printing inks for the production of compostable packaging" (available on request).

The information in this document reflects Siegwerk's policy and commitments. This statement is valid without signature.