



GANS INK & SUPPLY COMPANY, INC.

www.gansink.com

February 12, 2019

Product Safety Certification for Printing Inks & Coatings

Inks and coatings sold by Gans Ink and Supply Co, Inc. (Gans) **are not** formulated with the following *materials* (see below). Please see endnote (1) for included Gans products. No processes applied by Gans are likely to adulterate with these *materials*. Additionally, components used to make our inks **are not** formulated with, and no processes applied by our suppliers are likely to adulterate with these *materials*:

List of materials

1. **Hazardous Materials:** chemicals that are known to present a hazardous exposure to users of the product, or to purchasers of printed materials under normal conditions of use or in foreseeable emergency situations (OSHA). All exceptions are noted in the Hazardous Ingredients portion of the product Safety Data Sheet (SDS). (No Tributyltin, Benzo(a)pyrene BaP)
2. **Hazardous Waste:** materials listed as RCRA Hazardous Waste F-list, K-list, P-list, or U-list, or that are ignitable, corrosive, reactive, or toxic, unless specifically listed on the product Safety Data Sheet.
3. **Toxic Substances:** any raw materials that are not registered on the Toxic Substances Control Act Inventory of Chemical Substances (TSCA).
4. **Heavy Metals:** pigments or other materials based on Lead, Cadmium, Hexavalent Chromium, Mercury or Nickel. Total trace amounts of these heavy metals is expected to be less than 100 parts per million (ppm) (mg/kg). (California Toxics in Packaging Prevention Act; CONEG/TPCH Certification; Article 11 of EU 94/62/EC). Trace amount of lead is expected to be less than 90 ppm (Consumer Product Safety Improvement Act of 2008; Sec. 101; effective August 14, 2009 ⁽³⁾).
5. **Drinking Water Toxins:** substances listed pursuant to the California Safe Drinking Water and Toxic Enforcement Act (**Proposition 65, Prop 65**) in an amount that would require a warning to users of the product, or to purchasers of printed materials using these products. **All exceptions are noted in the Regulatory Information section of the product SDS (Section 15)**. (no Nickel, Antimony Trioxide, Short or Medium Chain Chloroparaffins, PCP, TeCP, TriCP, PCB, TPhT, o-PP, Trichloroethylene, or Benzophenone).
6. **Ozone Depleting Substances:** any Class I or Class II Ozone depleting chemicals listed under the Clean Air Act Amendments of 1990, Montreal Protocol, Japan Cabinet Order 202/322 and no Halons, carbon tetrachloride or **fluorinated greenhouse gases:** CFC, HCFC, HFC, HBFC.

7. **Hazardous Air Pollutants:** no acetaldehyde (ethanal) or any other substance listed as a Hazardous Air Pollutant (HAP) in Section 112 (definitions) of the **Clean Air Act** (as amended 1990), or any **Polycyclic Aromatic Hydrocarbons (PAH)**, except as follows: conventional (not UV-cure) offset inks may contain a maximum of 1.3 % (wt) cobalt compound, and/or maximum 1.7% manganese compound, and/or maximum 0.15% glycol ethers in ink driers (listed HAPs) ⁽²⁾.
8. **Toxic Air Contaminants and Ozone Depleting Compounds (TAC/ODC):** no TAC/ODC as defined in South Coast Air Quality Management District Rule 301 (**SCAQMD Rule 301**). Also, no Gaseous Sulfur Compounds, Specific Organic Gases (Rule 301 (b)(29)), Oxides of Nitrogen, or Carbon Monoxide.
9. **Toxic Air Contaminants** as defined by South Coast Air Quality Management District Rule 1401 (**SCAQMD Rule 1401**)⁽³⁾: no Toxic Air Contaminants as listed in Rule 1401 Table I, except as follows. These materials may be found in conventional (not UV-cure) inks only: manganese compound maximum 1.7% (wt); glycol ethers maximum 0.15%.
10. **Phthalates:** no phthalates commonly used as plasticizers in the plastics industry. These include DEHP, DNHP, DBP, DIBP, BBP, DINP, DIDP and DnOP. Total trace amounts of any phthalates is expected to be less than .1% (Consumer Product Safety Improvement Act of 2008, Sec. 108 ⁽³⁾) (California Health and Safety Code, Section 108937 ⁽³⁾).
11. **Volatile alkyl nitrites:** Consumer Product Safety Act banned hazardous product.
12. **Dyes:** we do not use the following Disperse Dyes: Blue 1, 3, 7, 26, 35, 102, 106, 124; Yellow 1, 3, 7, 9, 23, 39, 49, 56; Orange 1, 3, 11, 37, 59, 76, 149; Red 1, 11 (see endnote 1), 17, 151; Brown 1; Acid Red 26, Basic Red 9, Basic Violet 14, Direct Black 38, Direct Blue 6, Direct Red 28, Solvent Red 23. Dyes, including azo dyes are used only in sublimation inks, and some security Solvent Reactive Erasable inks.
13. **Halogenated (i.e. chlorinated, brominated) Phenols, Chloro Organic Carriers, Dimethylfumarate, Formaldehyde, Perfluorinated Tensides, Cleavable Amines, Pesticides, PVC, Halogenated Diphenyl Methanes, Beryllium Oxide, Beryllium Copper, Tetrabromobisphenol A TBBPA, Perchlorates, Triclosan**
14. **REACH:** no **Substances of Very High Concern (SVHC) (List updated 27 June, 2018), or Banned Substances (REACH 1907/2006/EC; 1907/2006/EC)**, except as follows: sodium perborate monohydrate (CAS 15120-21-5) is found in Gans Plasti-Pro, Case Hard, Case-Hard II, and Hard Dry inks. ⁽⁵⁾
15. **Flame retardants, halogenated, chlorinated, bromated or otherwise:** No polyhalogenated compounds: brominated biphenyls (BBP) or polybromobiphenyls; PCB, PBB, Decabromodiphenyl ether (also known as decaBDE, deca-BDE, DBDE, deca, decabromodiphenyl oxide, DBDPO, or bis(pentabromophenyl) ether), Polybromodiphenyl ether PBDE, Hexabromocyclododecane (HBCDD).

16. **Organotin Compounds:** no use of Monobutyltin MBT, Dibutyltin dBT (DBT), Dioctyltin DOT, Tributyltin TBT, Triphenyltin TPhT (TPT).
17. **Surfactants:** no Octyl Phenol (OP), Nonyl Phenol (NP), or Nonylphenol Ethoxylate (NPEO) compounds
18. **Products of Human or Animal Origin:** No materials of human or animal origin.
19. **Latex:** no latex or rubber, natural or synthetic.
20. **Jatropha:** no materials derived from jatropha plants
21. **Halogens:** no fluorine, chlorine, bromine, or iodine.
22. **Bisphenol A (BPA):** no use of BPA
23. **3M Company, Compounds of High Concern:** no 3M RMIF Section H/Table H Materials of High Concern.
24. **p-Phenylenediamine (PPD):** no PPD is used in the manufacture of any Gans Ink product, or the raw materials used to make our products.
25. **Japan Cabinet Order 202, amended by Cabinet Order 322, Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture:** Polychlorinated Naphthalene (PCN), Tributyltin Oxide TBTO, Tributyltin TBT, Triphenyltin TPT
26. **Radioactive Substances:** no radioactive substance
27. **Fluorinated substances:** Perfluorooctane Sulfonate PFOS, Perfluorooctanoic acid PFOA and PFOS/PFOA related substances.
28. **Great Lakes Binational Toxics Strategy:** no Level I or Level II substances
29. **Ethanol:** For all conventional oxidative chemistry offset inks, and for all energy curable offset, flexo, and screen printing inks and coatings, ethanol is not a known ingredient or a probable contaminant.
30. **Asbestos:** No asbestos.
 - EPA Asbestos-Related Laws
 - The Asbestos Hazard Emergency Response Act (AHERA)
 - The Asbestos Information Act (AIA)
 - The Asbestos School Hazard Abatement Reauthorization Act (ASHARA)
 - The Clean Air Act (CAA)
 - Safe Drinking Water Act (SDWA)
 - The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
 - EPA Asbestos Regulations
 - Asbestos-Containing Materials in Schools Rule (40 CFR Part 763, Subpart E)
 - Asbestos Worker Protection Rule (40 CFR Part 763, Subpart G)
 - Asbestos Ban and Phaseout Rule (Remanded) (40 CFR Part 763, Subpart I)
 - Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) Regulations (40 CFR Part 61, Subpart M)

CERCLA Hazardous Substances and Reportable Quantities

Other Federal Agencies with Asbestos Regulations
Occupational Safety and Health Administration (OSHA)
Consumer Product Safety Commission (CPSC)

31. **Melamine:** No melamine, IUPAC 1,3,5-Triazine-2,4,6-triamine
32. **Korean REACH (K-REACH):** No Restricted Substances, Prohibited Substances, or Substances Requiring Preparation for Accidents, unless listed by CAS number in Section 3 of the product SDS.

Additional considerations for producers of children's books, and toys, apparel and footwear, packaging, and other products:

Our inks and coatings ⁽¹⁾, and the components therein, are not formulated with, or subjected to process likely to adulterate with any materials of concern listed in the following regulations and standards. Any exceptions are clearly listed. Therefore, we expect our inks and coatings ⁽¹⁾ to conform to the requirements of the following:

1. **RoHS** ⁽³⁾: European Union's Directive 2002/95/EC, Restrictions of Hazardous Substances (RoHS) Limits: Cadmium 100 ppm, Hexavalent Chromium 1000 ppm, Lead 1000 ppm, Mercury 1000 ppm, Polybrominated biphenyls (PBB) 1000 ppm, and Polybrominated diphenyl ether (PBDE) 1000 ppm.
2. **CFR Title 16** ⁽³⁾: Code of Federal Regulation, Title 16, Section 1303 Lead content limit: ≤ 0.06 percent of the weight of the total nonvolatile content.
3. **ASTM F-963** ^(3, 4): ASTM Standard F-963 limits for heavy metal content of soluble surface coating material: Antimony 60 ppm, Arsenic 25 ppm, Barium ⁽³⁾⁽⁴⁾ 1000 ppm, Cadmium 75 ppm, Chromium 60 ppm, Lead 90 ppm, Mercury 60 ppm, and Selenium 500 ppm
4. **EN71-3:1994** ^(3, 4), **BS5665-3:1995** ^(1, 3) and **update European Commission Directive 2009/48/EC** ^(2, 3, 4): Specifications for Migration of Certain Elements, limits as listed in specification ^(2, 4); Gans ink products ⁽¹⁾ do not contain any Allergenic Fragrances as listed in 2009/48/EC.
5. **California Health and Safety Code, Section 108937** ⁽³⁾: Phthalates DEHP, DBP, BBP, DINP, DIDP and DnOP content limit: ≤ .1%.
6. **Consumer Product Safety Improvement Act of 2008 (CPSIA)** ⁽³⁾:
 - Sec. 101 Lead content limit: ≤ 0.009 percent
 - Sec. 108 Phthalates DEHP, DBP, BBP, DINP, DIDP and DnOP content limit: ≤ .1%
7. **State of Maine, Title 38, Chapter 16-D: TOXIC CHEMICALS IN CHILDREN'S PRODUCTS** ⁽³⁾: no **Chemicals of High Concern**

8. **Canadian Hazardous Products Acts, R.S. CH.H-3 Part 1** ⁽³⁾: Mercury < 10 ppm

9. **Arvato Limits, Restricted Substances Specification EN-D-001, 1-JAN-2011** ⁽³⁾⁽⁴⁾: Sum total of Lead, Cadmium, Mercury, Hexavalent Chromium < 100 ppm; Arsenic < 25 ppm, Barium < 350 ppm, Cadmium < 5 ppm, Chromium < 5 ppm, Mercury < 5 ppm, Lead < 40 ppm, Antimony < 60 ppm, Selenium < 200 ppm.

10. **OEKO-TEX® Standard 100** ⁽³⁾: We do not use any materials listed in Test Catalogue, Limit Values And Fastness, Parts 1, 2, or 3.

11. **American Apparel & Footwear Association's (AAFA) Restricted Substance List (RSL) Twelfth Edition, March 2013** ⁽³⁾: We do not formulate with any materials in the RSL. Appendix II lists special labeling requirements for Korean Safety Quality Mark Act, for all apparel made with sublimation dyes (Disperse Dyes, and some Azo Dyes). This category includes all Gans Sublimation Inks, including Pyroscript, Pyroscreen, Pyrojet inks.

12. **Dodd-Frank Wall Street Reform and Consumer Protection Act, HR4173 (Dodd-Frank)** ⁽³⁾; **Section 1502: Conflict Minerals (columbite-tantalite (coltan), cassiterite, gold, wolframite)**: no Conflict Minerals or their derivatives are used to make Gans products ⁽¹⁾.

13. **European Parliament And Council Directive 94/62/EC** ⁽³⁾: no lead, cadmium, mercury or hexavalent chromium. Concentrations are expected to be below the 100 ppm (wt.) limit.

Respectfully yours,



Marco Ramos

Technical Director, Environmental Compliance

Endnotes

(1) The following product categories are included: Conventional and UV-cure lithographic/offset and letterpress inks; All intaglio inks; Water-based and UV-cure flexographic inks; Water-based and UV-cure screen inks; Water-based jet inks; all previous categories include pigmented and dye sublimation products.

Additionally, all water-based coatings are included.

Dye Disperse Red 11 may be present in some water-based, flexo and screen sublimation inks.

(2) All offset, letterpress and intaglio inks may contain cobalt and/or manganese compounds as driers, except the following: UV-cure offset inks, Pyroscript (sublimation), Soytech, and Rubber Base. UV-cure, Pyroscript, Soytech, and Rubber Base offset inks do not contain ink driers and therefore do not contain cobalt or manganese compounds and do not contain HAPs.

(3) This standard does not apply to printing ink, but may apply to an end product made from printing ink, or to users of printing ink. Gans Ink products conform to these standards to help our customers produce fully compliant and safe products, and/or to meet their regulatory obligations. It is the responsibility of the manufacturer of such regulated end products to perform required tests to assure the entire end product is compliant. It is also the responsibility of the ink user to use our products in compliance with all regulations.

For example:

- CFR Title 16, Sec. 1303.2 Definitions: "does not include printing inks"
- Consumer Product Safety Improvement Act of 2008, 16 CFR Part 1500.91 (d) (5) and (6) excludes coatings and CMYK process inks respectively. This is a Final Ruling listed in Federal Register/ Vol. 74, No. 164/ Wednesday, August 26, 2009/ Rules and Regulations

(4) Manufacturers under jurisdiction of these standards should be cautious when using any coating that contains warm red pigments like Pantone® Warm Red, and Pantone® Red 032. The following pigments contain barium compounds: Permanent Red 2B/Pigment Red 48:1, CAS 7585-41-3; Red Lake C/Pigment Red 53:1, CAS 5160-02-1; Lithol Red/Pigment Red 49:1, CAS 1103-38-4. A Gans technical representative will be happy to help you find alternatives.

(5) Sodium perborate monohydrate, CAS number 11138-47-9, appears in a very low concentration (less than 1% by weight), dispersed matrix of ink resins and oils (non-inhalable form), in Gans products: Plasti-Pro process inks A102550 to A102553; and Hard Dry Pantone blend colors. This material is listed by the European Chemicals Agency, in an inhalable dust form, as a Substance of Very High Concern.