Statement On Web Offset News Inks and Letterpress News Inks

The following information describes the typical components of Offset and Letterpress News Inks and discusses specific issues including heavy metal, PCB's and solvents as applied to these inks.

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Typical Offset and Letterpress News Ink Compositions		
	Letterpress (%)	Offset (%)
Pigment	9 - 11	11 - 20
Resins	0 - 5	7 - 25
Petroleum Oils/Vegetable Oil	80 - 90	30 - 65
Petroleum Distillates	0 - 3	0 - 30
Modifiers (e.g. Polethylene wax, clay)	0 - 7	0 - 25

1. Pigments

In black newspaper inks, the pigment is a carbon specifically manufactured for this process. The pigments in coloured printing inks are complex organic compounds which are insoluble in both the ink vehicle and water. See also the paragraph "Heavy Metals in Printing Inks".

2. Resins

Two classed of resins are used in news inks. The first is based on polymerized petroleum feed stock and is known as hydrocarbon resins. The second class is manufactured by the modification and polymerization of resin, a gum derived from pine and fir trees.

3. Petroleum and Vegetable Oils

The petroleum oils are of the same type as used for lubricating purposes. The vegetable oils are either soya or canola types, which may be modified to make them suitable for news ink applications / Members of CPIMA are actively pursuing opportunities to further replace petroleum oils by vegetable counterparts in offset and letterpress inks for newspapers.

4. Petroleum Distillates

The oil based letterpress and offset inks for newspapers manufactured by members of the CPIMA do not contain solvents in accepted sense of the word. Instead, the inks are adjusted with high boiling petroleum oils, which have been either severely treated or refined to remove any known hazardous materials.

5. Modifiers

The vast majority of the modifier content (90%) of the news inks is in china clay or similar materials.

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6. Heavy Metals

Members of the CPIMA supply a variety of oil based offset and letterpress printing inks. The heavy metals such as cadium, arsenic, mercury, antimony, lead, selenium and hexavalent chromium are not used in any of the news inks manufactured by members of the CPIMA. However, these heavy metals may be present as trace contaminants in parts per million in all pigments. Similarly, pigments or other compounds that are based on heavy metals, are specifically excluded from the news inks that are manufactured. Our inks meet the 1994 CONEG regulations.

7. PCB's

Members of the CPIMA have at no time used polychlorobiphenyls in the manufacture of their printing inks.

8. Polymerisation of Offset and Letterpress News Inks

Significant polymerisation of these two ink types is neither intended nor expected, because no catalysts are contained in the inks to accerate the oxidative drying mechanism of the vegetable oils. The vegetable oils themselves are the only component of the ink that has any significant potential for polymerization after printing. Furthermore, in vegetable oil rich inks, the major oil component is either soya or canola oil, which are classified as a "semi-drying" oil because they intrinsically have a low potential for polymerization, as evidence by their use as cooking oils.

9. Regulations Concerns

Due to the chemical nature of the product, it is therefore not controlled under WHMIS (Workplace Hazardous Materials Information System) legislation nor the transportation of dangerous goods. Any waste ink should be considered to be a liquid industrial waste and should be disposed of accordingly.

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