

ASTM D-4236 EVALUATION FOR *INK IN 4 COLORS*

Intertek Job Number: SHAH00484679

Company: Superstrong Stationery Manufacturing Co., Ltd
Across West Industry Garden Of Guanhaiwei Town
CiXi City, Ningbo City
China

Date: September 8, 2014

Details of Product: Description: Ink (yellow, blue, red, black)
Age grading on package, years: 3+
Physical form: Liquid
Mass or volume: 30ml

Ingredients and %w/w composition are listed in the appendix (subject to valid request).

The above named product, and the ingredients in the product formulation, were assessed for the following chronic hazards, and evaluated for compliance with the labeling requirements designated in the U.S. Consumer Product Safety Commission (CPSC) Regulations (16 CFR §1500.14; 57 FR 46626) and ASTM D-4236 (LHAMA Certification):

- Carcinogenicity
- Neurotoxicity
- Reproductive and developmental toxicity
- Sensitization
- General organ and tissue toxicities

Searches of medical and toxicological scientific databases were conducted to determine if any of the ingredients in the product, at the levels used, or as components of the final formulated product, are known to cause chronic adverse health effects to consumers when used as intended or under conditions of reasonable foreseeable misuse.

Conclusions: Based on the scientific literature available and the information provided to date, the *Ink in 4 Colors* would not be expected to pose any significant chronic adverse health effects to humans under normal use or reasonable foreseeable misuse.

Consequently, the *Ink in 4 Colors* conforms to the health requirements of ASTM D-4236 and requires no additional labeling in accordance with the Consumer Product Safety Commission's Regulations as mandated by the Labeling of Hazardous Art Materials Act (LHAMA). The *Ink in 4 Colors* must bear the following statement: "Conforms to ASTM D-4236."

Additional considerations to be aware of concerning *Ink in 4 Colors*:

- This assessment assumes that the writing instrument or cartridge is of such construction that the ink will, under any reasonable foreseeable condition of manipulation and use, emerge only from the writing tip.

- It should be noted that no toxicological data was identified for the ingredients marked with an (*) in the appendix. Therefore if the writing instrument/cartridge is not of the construction as described in the regulation 16 CFR § 1500.83 (Exemptions for small packages, minor hazards, and special circumstances), no conclusions can be made as to whether the *Ink in 4 Colors* would pose any significant chronic adverse health effects to humans under normal use or reasonable foreseeable misuse, due to a lack of safety/toxicity information available on the ingredients marked with an (*) in the appendix.
- The possibility exists that one or more ingredients, marked with an (**) in the appendix, could cause idiosyncratic responses, such as eczema-type allergic reactions.

The following conditions apply to this assessment:

- This product was not evaluated for heavy metal or lead content, which can affect the ability of manufacturers to label their products in compliance with ASTM D-4236.
- This product was not assessed for compliance with regulations, other than as described above.
- This product was not assessed for compliance with the California EPA, Proposition 65.
- This product has not been evaluated for potential physical injury such as choking hazard, aspiration risk, or mechanical irritation.
- It was assumed that the formulation given is accurate, all ingredients are disclosed and concentrations are correct, as listed in the appendix table, subject to valid request.
- It was assumed that neither this product, nor the ingredients used in the product, contained any impurities/contaminants that would cause toxicity in a consumer.

This evaluation is relevant solely to the conditions described herein. Any substitution of ingredients, increase in concentrations of use, or change of use pattern will necessitate a new evaluation. Should occurrences of significant adverse reactions amongst consumers (e.g. high number of undesirable effects) be reported for Ink in 4 Colors, the board certified toxicologist herein shall be informed and the necessity for a new evaluation will be determined.

This evaluation applies only to the formulation that has been provided in the corresponding confidential appendix to this report. This appendix is held on file at the Shanghai Intertek Office.

Signature of Board Certified Toxicologist:



Joanne Wan:
Diplomate, American Board of Toxicology
Intertek Scientific & Regulatory Consultancy

September 8, 2014
Date

END OF MAIN REPORT

NOT TO BE DISCLOSED WITH REPORT UNLESS VALID REQUEST**APPENDIX: SUMMARY OF *INK IN 4 COLORS* FORMULA**

Intertek Job Number: SHAH00484679

Ingredient Name¹	CAS #	Content of Product (%w/w)
Ethanol	64-17-5	10-41
1-methoxy-2-propanol	107-98-2	50-76
Rosin **	85026-55-7	0-5
Yellow 21 **	84215-37-2	0-4
Blue 5 **	72928-62-2	0-7
Red 8 *	33270-70-1	0-5
Black 27 *	72812-34-1	0-9

¹ Note: No independent testing of the formulation was conducted by the reviewer; thus, it is assumed that this formulation is accurate and complete. Furthermore, it is assumed that none of the ingredients contain impurities at levels that may cause harm to the consumer.

*,** For details of the concern of these ingredients, please refer to the main report

"Valid request" refers to request from formulation owner, which may not always be the report applicant.

END OF APPENDIX