



# APPLIED TECHNICAL SERVICES, INC.

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## Summary of Test Results

### US/CPSIA Safety Testing

#### Description of Product & Testing Information

Sample: Various UV Ink Colors

Customer: Mimaki USA

Date Received: September 14, 2012

Purchase Order #: HAGIGI091212

Test Report #: C188014

The following rules, bans, standards, and regulations apply for this product:

Product(s)	Compliance Pass/Fail	Law/ACT	US/State Regulation
SPC-0659C UV Ink LH-100 220ml Cyan SPC-0659K UV Ink LH-100 220ml Black SPC-0659M UV Ink LH-100 220ml Magenta SPC-0659W UV Ink LH-100 220ml White SPC-0659Y UV Ink LH-100 220 ml Yellow	Pass	CPSIA Section 101	16 CFR Part 1303; CPSC-CH-E1002-08 (Lead Ban)
	Pass	The Illinois Lead Poisoning Prevention Act	Limit on Total Lead Content in Surface Coatings of Children's Jewelry and Childcare Articles
	Pass	Connecticut Public Act 10-113	Limit on Total Cadmium in Children's Jewelry
	Pass	Maryland Chapter 578	Limit on Total Cadmium in Children's Jewelry
	Pass	CPSIA Section 106	ASTM F963-11, Clause 4.3.5.2 Soluble Metal Limits
	Pass	CPSIA Section 108	Phthalate Limits in Toys & Childcare Article
	Pass	California Proposition 65	Phthalate Limits

#### Professional Engineers and Scientists

#### Design • Consulting • Testing and Inspection

Members in AAFS, ACS, ANSI, ASM, ASME, ASNT, ASQ, ASTM, AWS, BOMA, FSCT, IAAI, IWCA, NACE, NCSL, NFPA, SAFS, TAPPI

GEORGIA SOCIETY OF PROFESSIONAL ENGINEERS, NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

In the state of North Carolina, Engineering Services will be provided by ATS Engineering, PLLC or a properly licensed subcontractor

In the state of New York, Engineering Services will be provided by Neville W. Sachs, P.E., PLLC or a properly licensed subcontractor



CHEMICAL TEST REPORT

Ref. C188014 Date September 19, 2012 Page 1 of 3

Customer: Mimaki USA, Inc., 150-A Satellite Blvd., Suwanee, GA 30024

Attention: Dann Hagigi

Purchase Order #: HAGIGI091212 Part /Name: Various (See Test Results Table Below)

Material Designation: Inks

Special Requirement: Samples prepared using microwave digestion techniques for lead and cadmium analyzed per CPSC-CH-E1003-09.

Lab Comment: ICP atomic emission techniques utilized to analyze for lead as per ASTM E1479-99(2005).

Test Results

Composition: (parts per million, mg/kg)

Table with 6 columns: Identification, Pb, Cd, Pass/Fail, and ATS. Rows include CPSIA Section 101 requirements for lead, Illinois LPPA 410 ILCS 45/6 requirements for lead, Connecticut Public Act 10-113 requirements for cadmium, Maryland Chapter 578 (House Bill 145) requirements for cadmium, and five ink samples (Cyan, Black, Magenta, White, Yellow) with their respective lead and cadmium levels and pass/fail status.

†Requirements for children’s consumer products manufactured after August 14, 2011: Lead in accessible substrates 100 ppm maximum; Lead in paints and similar surface coatings 90 ppm maximum. Under Illinois law, children’s products containing between 40 ppm and 600 ppm lead must bear a warning statement that indicates that at least one component part of the item contains lead.

‡Requirement for children’s jewelry manufactured, sold, or distributed in Maryland after July 1, 2012 or Connecticut after July 1, 2014: Cadmium 75 ppm maximum.



Prepared by: [Signature] R. Byrd Technician
Approved by: [Signature] D. M. McKay Supervisor

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CHEMICAL TEST REPORT

Ref. C188014 Date September 19, 2012 Page 2 of 3

Customer: Mimaki USA, Inc., 150-A Satellite Blvd., Suwanee, GA 30024

Attention: Dann Hagigi

Purchase Order #: HAGIGI091212 Part #/Name: Various (See Test Results Table Below)

Material Designation: Inks

Special Requirement: Samples extracted and prepared in accordance with ASTM F963-11.

Lab Comment: ICP atomic emission techniques utilized to analyze for soluble migrated element as per ASTM F963-11: Standard Consumer Safety Specification for Toy Safety.

Test Results

Composition: (parts per million, mg/kg)

Table with 9 columns: Identification, Sb, As, Ba, Cd, Cr, Pb, Hg, Se. Rows include specifications for ASTM F963-11 and various ink samples (Cyan, Black, Magenta, White, Yellow) with their respective test results.

Sb-Antimony; As-Arsenic; Ba-Barium; Cd-Cadmium; Cr-Chromium; Pb-Lead; Hg-Mercury; Se-Selenium.



Prepared by: [Signature] R. Byrd Technician
Approved by: [Signature] D. M. McKay Supervisor

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# CHEMICAL TEST REPORT

Ref. C188014

Date September 19, 2012

Page 3 of 3

Customer: Mimaki USA, Inc., 150-A Satellite Blvd., Suwanee, GA 30024

Attention: Dann Hagigi

Purchase Order #: HAGIGI091212 Part #/Name: UV Ink LH-100 220 ml (Various Colors)

Material Designation: Inks

Special Requirement: N/A

Lab Comment: GC/MS was used to identify and quantify the phthalate compounds according to CPSC-CH-C1001-09.3.

## Test Results

Composition: (parts per million, mg/kg)

Identification				DnHP†‡	DnBP†§	BBP†§	DEHP†§	DnOP§	DINP§	DIDP†§
				1000 Max.						
SPC-0659C	Cyan	1	Pass	*N.D.						
SPC-0659K	Black	2	Pass	*N.D.						
SPC-0659M	Magenta	3	Pass	*N.D.						
SPC-0659W	White	4	Pass	*N.D.						
SPC-0659Y	Yellow	5	Pass	*N.D.						

\*N.D. – None Detected <50 ppm: Di-n-Hexyl Phthalate (DnHP) Di-n-Butyl Phthalate (DnBP), Butyl Benzyl Phthalate (BBP), Di-Ethyl Hexyl Phthalate (DEHP), Di-n-Octyl Phthalate (DnOP), Di-Isononyl Phthalate (DINP) and Di Isodecyl Phthalate (DIDP)

§CPSIA Subsection 108(a) requirement for phthalates ‡CA Prop 65 requirements for phthalates



Prepared by: M. M. Tippens M. M. Tippens  
Technician

Approved by: D. M. McKay D. M. McKay  
Supervisor

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