



Test Report

No.T32420250095TC

Date: Jan 15, 2024

Page 1 of 5

POLYKOTE INK & PAINT (SHENZHEN) LTD.
NO. 118, HUANG PU ROAD, SHAJING SUBDISTRICT, BAOAN, SHENZHEN, CHINA (ZIP CODE: 518125)

The following samples were submitted and identified by/on behalf of the client as:
PLEASE SEE ATTACHMENT

WATERBASED FLEXOGRAPHIC & GRAVURE INK NO.:	DESCRIPTION
WF103/074/490/432/433/379/301/326/WR62/91/16/17/11/39/22/26	INK

Case No. : CA324202503479
Sample Receiving Date : JAN 03, 2024
Testing Period : JAN 03, 2024 – JAN 15, 2024

Selected test(s) as requested by the client, please refer to test result page(s) for details:

Test Requested	Conclusion
1. EU Directive 2015/863/EU amending Annex II to Directive 2011/65/EU (RoHS, Previously 2002/95/EC) - Wet Chemical for Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs & PBDEs content	PASS
2. EU Directive 2015/863/EU amending Annex II to Directive 2011/65/EU (RoHS, Previously 2002/95/EC) - Phthalates Content	PASS

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
SGS Hong Kong Ltd.



To Man Wah, Po
Technical Manager

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Test Results:
1. EU Directive 2015/863/EU amending Annex II to Directive 2011/65/EU (RoHS, Previously 2002/95/EC) - Wet Chemical for Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs & PBDEs content

Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC62321-5:2013, IEC 62321-7-2:2017, IEC62321-6:2015

For Lead, Cadmium and Mercury, analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES) / Atomic Absorption Spectrometer (AAS)

For Hexavalent Chromium, analysis was performed by Ultraviolet Visible Spectrophotometer (UV-Vis)

For PBBs & PBDEs, analysis was performed by Gas Chromatography Mass Spectrometer (GC-MS)

Test Item(s)	Result (mg/kg)	MDL (mg/kg)	Permissible Limit (mg/kg)
	1		
Lead (Pb)	ND	2	1000
Cadmium(Cd)	ND	2	100
Mercury (Hg)	ND	2	1000
Hexavalent Chromium (CrVI) by alkaline extraction	ND	8	1000
Sum of PBBs	ND	--	1000
Monobromobiphenyl	ND	5	--
Dibromobiphenyl	ND	5	--
Tribromobiphenyl	ND	5	--
Tetrabromobiphenyl	ND	5	--
Pentabromobiphenyl	ND	5	--
Hexabromobiphenyl	ND	5	--
Heptabromobiphenyl	ND	5	--
Octabromobiphenyl	ND	5	--
Nonabromobiphenyl	ND	5	--
Decabromobiphenyl	ND	5	--
Sum of PBDEs	ND	--	1000
Monobromodiphenyl ether	ND	5	--
Dibromodiphenyl ether	ND	5	--
Tribromodiphenyl ether	ND	5	--
Tetrabromodiphenyl ether	ND	5	--
Pentabromodiphenyl ether	ND	5	--
Hexabromodiphenyl ether	ND	5	--
Heptabromodiphenyl ether	ND	5	--
Octabromodiphenyl ether	ND	5	--
Nonabromodiphenyl ether	ND	5	--
Decabromodiphenyl ether	ND	5	--
Comment	PASS	--	--

Specimen Description:

1. Black ink (WF103/ 074/ 490/ 432/ 433/ 379/ 301/ 326/ WR62/ 91/16/ 17/11/ 39/ 22/ 26)

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- Note:
- mg/kg = milligram per kilogram
 - MDL = Method Detection Limit
 - ND = Not Detected (lower than MDL)
 - Storage conditions and production date of the tested sample are unavailable and thus results of Cr(VI) represent status of the sample at the time of testing
 - The result of Hexavalent chromium (Cr(VI)) is deemed to be “ND” since the result of total chromium content is “ND”, so the testing of Hexavalent chromium (Cr(VI)) is not requirement.
 - If the Chromium (Cr) content is greater than the MDL, And confirmation test of Hexavalent Chromium (Cr(VI)) is required.
 - The maximum permissible limit is quoted from the EU Directive 2015/863/EU amending Annex II to Directive 2011/65/EU.

2. EU Directive 2015/863/EU amending Annex II to Directive 2011/65/EU (RoHS, Previously 2002/95/EC) - Phthalates Content

Method: With reference to IEC 62321-8:2017

Analysis was performed by Gas Chromatography Mass Spectrometer (GC-MS)

Test Item(s)	CAS No.	Result(s) (mg/kg)	MDL (mg/kg)	Permissible Limit (mg/kg)
Specimen No.	--	1		
Dibutyl Phthalate (DBP)	84-74-2	ND	50	1000
Benzylbutyl Phthalate (BBP)	85-68-7	ND	50	1000
Bis-(2-ethylhexyl) Phthalate (DEHP)	117-81-7	ND	50	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	50	1000

Specimen Description:

1. Black ink (WF103/ 074/ 490/ 432/ 433/ 379/ 301/ 326/ WR62/ 91/16/ 17/11/ 39/ 22/ 26)

- Note:
- mg/kg = milligram per kilogram
 - ND = Not Detected (lower than MDL)
 - MDL = Method Detection Limit
 - 1% = 10000 mg/kg = 10000 ppm

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Remark:

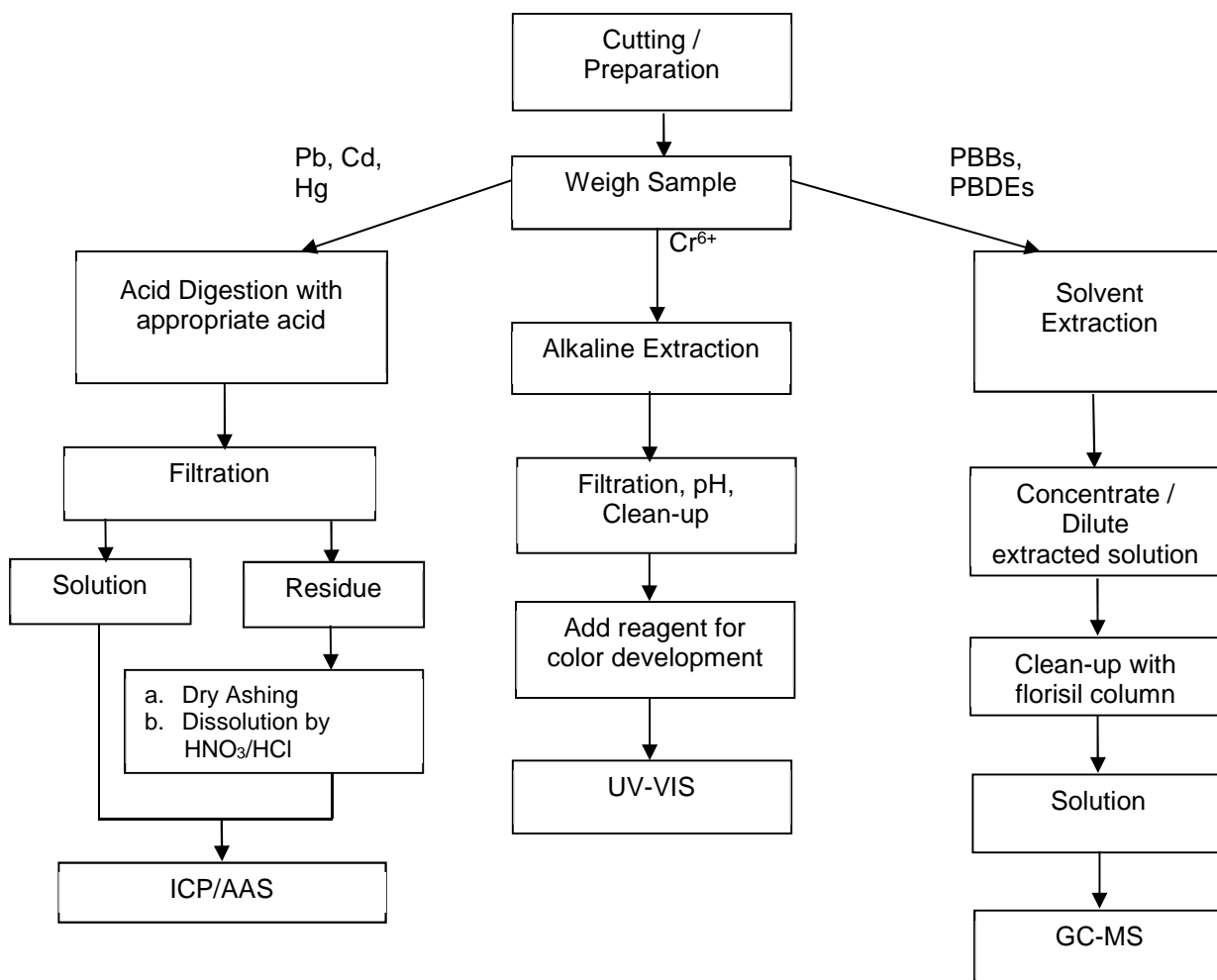
When statement of conformity is made, unless inherent in the requested specification, the decision rule would be based on the non-binary statement with guard band (is equal to the expanded measurement uncertainty with a 95% coverage probability, $w = U_{95}$) in ILAC-G8:09/2019 Clause 4.2.3.

“Pass - the measured value is within (or below / above) the acceptance limit, where the acceptance limit is below / above to the guard band.” or “Pass - The measured values were observed in tolerance at the points tested. The specific false accept risk is up to 2.5%.”.

“Fail - the measured value is out of (or below / above) the tolerance limit added / subtracted to the guard band.” or “Fail - One or more measured values were observed out of tolerance at the points tested”. The specific false reject risk is up to 2.5%.

“Inconclusive – It is not possible to state the conformity. Either one or more measured values were observed in the portion of the expanded measurement uncertainty intervals at the points tested where the specific risk is up to 50%.”

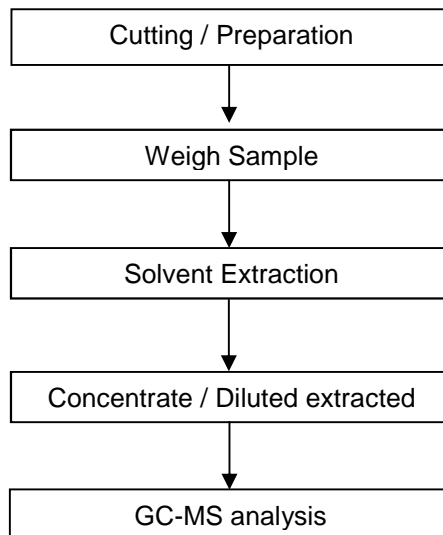
Flowchart:



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Flowchart:



- Note : 1. For Cr(VI), spot test is adopted for metal sample.
 2. The Cd and Pb contents test on polymeric samples were dissolved totally by pre-conditioning method according to above flow chart.

Sample Photo:

Pic.1



SGS authenticate the photo on original report only

*** End of Report ***

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