

Test Report

No. F690101/LF-CTSAYHA23-11652

Issued Date: 2024. 01. 03

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DONGYANG INK CO., LTD.
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Korea



The following sample(s) was/were submitted and identified by/on behalf of the client as:-

SGS File No. : AYHA23-11652
Sample Description : OFFSET SHEETFED PROCESS COLOR
Client Reference Data : ZEUS, COMAX, ARONON, PREMIER, ECOMAX, SOYA-IN, TOP, NEO-CROWN, Z-CROWN, COLORPIA, SHINE, SKINON
Style no./Item no. : -
Order No. : -
Buyer : -
Manufacturer : -
Country of Origin : -
Country of Destination : -
Received Date : 2023. 12. 12
Test Period : 2023. 12. 12 ~ 2024. 01. 03
Test Result(s) : For further details, please refer to following page (s)
Report Comments : The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test report is not related to Korea Laboratory Accreditation Scheme.
The statement of conformity was made on the requested specification or standard.
The decision rule would be based on the binary statement (Pass/Fail) according to ILAC-G8:09/2019 guideline 4.2.1 without taking measurement uncertainty into account by applicant's agreement.
By the applicant's request, item No.s/part No.s & client reference information are stated/added on report.

Result Summary :

Test Requested	Conclusion
Directive 2009/48/EC and its amendment Council Directive (EU) 2017/738, Commission Directive (EU) 2019/1922 - EN71-3:2019 + A1:2021 – Migration of certain elements (By all conclusive testing)	PASS


Tonny Park


Billy Oh

Technical Manager / SGS Korea Co., Ltd

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CQP-7081-F01 (01)

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Test Results :

Directive 2009/48/EC and its Amendment Council Directive (EU) 2017/738, Commission Directive (EU) 2019/1922 - EN71-3: 2019 + A1:2021 – Migration of certain elements

Category II: Liquid or Sticky toy material

Method : With reference to EN71-3:2019 + A1:2021. Analysis of general elements was performed by ICP-MS. Chromium (III) was obtained by calculation, chromium (VI) was analyzed by IC-UV/VIS. Organic Tin was analyzed by GC-MS.

Test Item		Result (mg/kg)	Reporting Limit (mg/kg)	Permissible Limit EN71-3:2019 + A1:2021 (mg/kg)
		1		
Mass of trace amount	(mg)	--	--	--
Soluble Aluminium	(Al)	N.D.	50	560
Soluble Antimony	(Sb)	N.D.	1	11.3
Soluble Arsenic	(As)	N.D.	0.4	0.9
Soluble Barium	(Ba)	N.D.	50	375
Soluble Boron	(B)	N.D.	50	300
Soluble Cadmium	(Cd)	N.D.	0.15	0.3
Soluble Chromium (III)	(Cr (III))	N.D.	1	9.4
Soluble Chromium (VI)	(Cr (VI))	N.D.	0.0025	0.005
Soluble Cobalt	(Co)	0.97	0.5	2.6
Soluble Copper	(Cu)	N.D.	50	156
Soluble Lead	(Pb)	N.D.	0.2	0.5
Soluble Manganese	(Mn)	N.D.	50	300
Soluble Mercury	(Hg)	N.D.	0.5	1.9
Soluble Nickel	(Ni)	N.D.	9	18.8
Soluble Selenium	(Se)	N.D.	4	9.4
Soluble Strontium	(Sr)	N.D.	50	1,125
Soluble Tin	(Sn)	N.D.	0.08	3,750
Soluble Organic Tin	--	N.D.	--	0.2
Soluble Zinc	(Zn)	N.D.	50	938
Comment / Conclusion		PASS	--	--

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Test Item(s)		Soluble Organic Tin Result(s) (mg/kg)	Reporting Limit (mg/kg)
		1	
Methyl tin	(MeT)	N.D.	0.03
Dimethyl tin	(DMT)	N.D.	0.03
Di-n-propyl tin	(DProT)	N.D.	0.03
Butyl tin	(BuT)	N.D.	0.03
Dibutyl tin	(DBT)	N.D.	0.03
Tributyl tin	(TBT)	N.D.	0.03
n-Octyl tin	(MOT)	N.D.	0.03
Di-n-octyl tin	(DOT)	N.D.	0.03
Tetrabutyl tin	(TeBT)	N.D.	0.03
Diphenyl tin	(DPhT)	N.D.	0.03
Triphenyl tin	(TPhT)	N.D.	0.03

Sample Description :

1. Black ink

Note. 1. mg/kg = milligram per kilogram

2. N.D. = Not Detected (< Reporting Limit)

3. 1 % = 10,000 mg/kg = 10,000 ppm

4. Soluble Chromium (III) = Soluble Total Chromium – Soluble Chromium (VI)

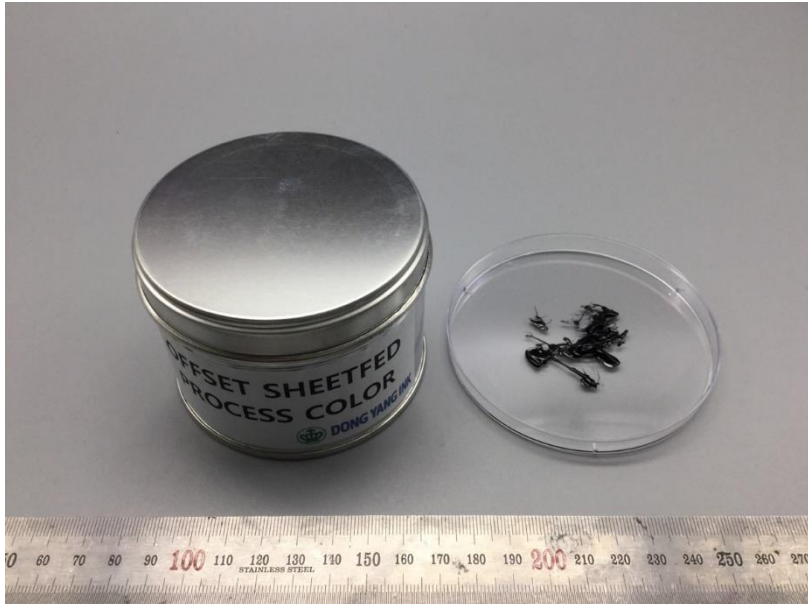
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Picture of Sample as Received :



AYHA23-11652

*** End of Report ***

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