

DONG YANG INK CO., LTD.
 338-6 Gagok-ri, Jinwi-myun
 Pyungtaek-city, Gyeonggi-do
 Korea



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

SGS File No.	: AYHA20-17083R1
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.	: -
Manufacturer	: -
Country of Origin	: -
Country of Destination	: -
Received Date	: 2020. 12. 28
Test Period	: 2020. 12. 28 to 2021. 01. 08
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.
Supersedes /Referral	: This test report supersedes previous report number, "F690101/LF-CTSAYHA20-17083" issued by SGS Korea.
Result Summary	:

Test Requested	Conclusion
Directive 2009/48/EC and its amendment Council Directive (EU) 2017/738, Commission Directive (EU) 2018/725 - EN71-3:2019 – Migration of certain elements (By all conclusive testing)	PASS

SGS Korea Co., Ltd.



Tommy Oh / Chemical Lab Mgr

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Test Results :

Directive 2009/48/EC and its Amendment Council Directive (EU) 2017/738, Commission Directive (EU) 2018/725 - EN71-3: 2019 – Migration of certain elements

Category II: Liquid or Sticky toy material

Method : With reference to EN71-3:2019. 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) (mg/kg)
	1			
Mass of trace amount (mg)	--		--	--
Soluble Aluminium (Al)	ND		50	1,406
Soluble Antimony (Sb)	ND		1	11.3
Soluble Arsenic (As)	ND		0.4	0.9
Soluble Barium (Ba)	ND		50	375
Soluble Boron (B)	ND		50	300
Soluble Cadmium (Cd)	ND		0.15	0.3
Soluble Chromium (III) (Cr (III))	ND		1	9.4
Soluble Chromium (VI) (Cr (VI))	ND		0.0025	0.005
Soluble Cobalt (Co)	2.47		0.5	2.6
Soluble Copper (Cu)	ND		50	156
Soluble Lead (Pb)	ND		0.2	0.5
Soluble Manganese (Mn)	ND		50	300
Soluble Mercury (Hg)	ND		0.5	1.9
Soluble Nickel (Ni)	ND		9	18.8
Soluble Selenium (Se)	ND		4	9.4
Soluble Strontium (Sr)	ND		50	1,125
Soluble Tin (Sn)	ND		0.08	3,750
Soluble Organic Tin	--		--	0.2
Soluble Zinc (Zn)	ND		50	938
Comment / Conclusion	PASS		--	--

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

Sample Description :

1. Black ink

Note. 1. mg/kg = milligram per kilogram

2. ND = Not Detected (< MDL)

3. 1% = 10000 mg/kg = 10000 ppm

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

Picture of Sample as Received :



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*** End of Report ***

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