



Test Report

No. F690101/LF-CTSAYHA19-03073

Issued Date : 2019. 03. 22

Page 1 of 3

KUMHO PETROCHEMICAL
#260-257, Cheoyong-ro
Nam-gu, Ulsan
Korea

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

SGS File No. : AYHA19-03073
Sample Description : ABS 750 SW
Style no./Item no. : -
Order No. : -
Manufacturer : -
Country of Origin : -
Country of Destination : -
Received Date : 2019. 03. 15
Test Period : 2019. 03. 15 to 2019. 03. 22
Test Result(s) : For further details, please refer to following page (s)
Result Summary :

Test Requested	Conclusion
EN71-3:2013 + A3:2018 – Migration of certain elements (By all conclusive testing)	PASS

SGS Korea Co., Ltd

Jeff Jang / Chemical Lab Mgr

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Test Results :
EN71-3:2013 + A3:2018 – Migration of certain elements
Category III: Scrapped-off toy material

Method : With reference to EN71-3:2013 + A3:2018. Analysis of general elements was performed by ICP-OES. 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 (EN71-3:2013 +A3:2018) (mg/kg)
	1			
Mass of trace amount (mg)	--		--	--
Soluble Aluminium (Al)	ND		50	70,000
Soluble Antimony (Sb)	ND		10	560
Soluble Arsenic (As)	ND		10	47
Soluble Barium (Ba)	ND		50	18,750
Soluble Boron (B)	ND		50	15,000
Soluble Cadmium (Cd)	ND		5	17
Soluble Chromium (Cr)	ND		0.15	--
Soluble Chromium (III) (Cr (III))	ND		5	460
Soluble Chromium (VI) (Cr (VI))	ND		0.18	0.2
Soluble Cobalt (Co)	ND		10	130
Soluble Copper (Cu)	ND		50	7,700
Soluble Lead (Pb)	ND		10	23
Soluble Manganese (Mn)	ND		50	15,000
Soluble Mercury (Hg)	ND		10	94
Soluble Nickel (Ni)	ND		10	930
Soluble Selenium (Se)	ND		10	460
Soluble Strontium (Sr)	ND		50	56,000
Soluble Tin (Sn)	ND		4.9	180,000
Soluble Organic Tin	ND		--	12
Soluble Zinc (Zn)	ND		50	46,000
Comment for EN71-3:2013 + A3:2018	PASS		--	--

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Page 3 of 3

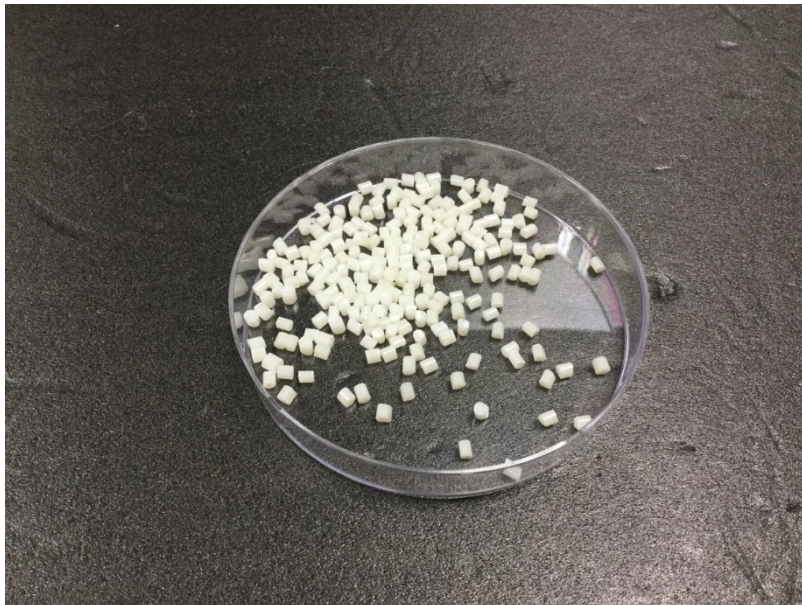
Test Item(s)	Soluble Organic Tin Result(s) (mg/kg)		MDL (mg/kg)
	1		
Methyl tin (MeT)	ND		0.5
Di-n-propyl tin (DProT)	ND		0.5
Butyl tin (BuT)	ND		0.5
Dibutyl tin (DBT)	ND		0.5
Tributyl tin (TBT)	ND		0.5
n-Octyl tin (MOT)	ND		0.5
Tetrabutyl tin (TeBT)	ND		0.5
Diphenyl tin (DPhT)	ND		0.5
Di-n-octyl tin (DOT)	ND		0.5
Triphenyl tin (TPhT)	ND		0.5

Sample Description :

- Ivory plastic

- Note.
1. mg/kg = milligram per kilogram
 2. ND = Not Detected
 3. 1% = 10000 mg/kg = 10000 ppm

Picture of Sample as Received :



AYHA19-03073

*** End of Report ***

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