

Like ink AB
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Test of Gnuggisar according to EN71-3

Sample identification: Gnuggisar från Like ink, temporary tattoos in four different colours

Date of arrival of test object to RISE: 2023-02-01

Date of testing: Week 6, 2023



Photo 1: Sample Object

Test according to SS-EN71-3 Migration of certain elements

Assignment

Test according to the European standard SS-EN 71-3:2019+A1:2021. Safety of toys – Part 3: Migration of certain elements.

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Confidentiality level

C2 - Internal

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Method

Test of temporary tattoos according to SS-EN 71-3:2019+A1:2021. Safety of toys – Part 3: Migration of certain elements.

All the elements except chromium (VI) and organic tin were determined by inductively coupled plasma-optical emission spectrometry (ICP-OES).

Organic tin was not determined since the total content of tin is below the limit for organic tin.

Chromium (VI) was determined by ion chromatography (IC) using inductively coupled plasma-mass spectrometry (ICP-MS) as detector. Chromium (VI) was determined in the sample parts where the migration of total chromium was higher than 50% of the migration limit for chromium(VI) applicable for the sample. The method is not accredited.

The following individual parts were selected by the client to be tested according to EN71-3, see photos for details.

A = Yellow material

B = Red material

C = Cerise material

D = Black material

*Additional acid was used to get the pH 1.2 ± 0.1

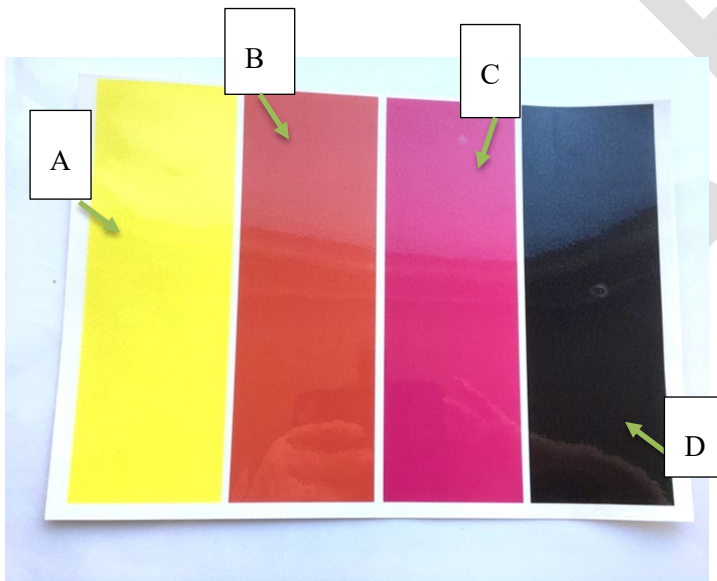


Photo 2 Sample Identification

Results SS-EN71-3

Element (mg/kg)	A	B	C	D	Migration limits Category III (mg/kg)
Aluminium, Al	<300	<300	<300	<300	28130
Antimony, Sb	<5	<5	<5	<5	560
Arsenic, As	<5	<5	<5	<5	47
Barium, Ba	<150	<150	<150	<150	18750
Boron, B	<150	<150	<150	<150	15000
Cadmium, Cd	<5	<5	<5	<5	17
Chromium (III), Cr (III)	<5	<5	<5	<5	460
Chromium (VI), Cr (VI)*	<0.053	<0.053	<0.053	<0.053	0.053
Cobalt, Co	<5	<5	<5	<5	130
Copper, Cu	<70	<70	<70	<70	7700
Lead, Pb	<5	<5	<5	<5	23
Manganese, Mn	<150	<150	<150	<150	15000
Mercury, Hg	<5	<5	<5	<5	94
Nickel, Ni	<10	<10	<10	<10	930
Selenium, Se	<25	<25	<25	<25	460
Strontium, Sr	<500	<500	<500	<500	56000
Tin, Sn	<1500	<1500	<1500	<1500	180000
Organic tin, Sn*	<2	<2	<2	<2	12
Zinc, Zn	<450	<450	<450	<450	46000

*The method is not accredited.

The toy parts fulfil the requirements according to EN 71-3:2019+A1:2021.

The results relate only to the items tested.

Decision rule: When comparing the measured results and requirement level, the average value of the measured results has been compared with the requirement level. No account is taken to the measurement uncertainty.

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