



INSTITUT PRO TESTOVÁNÍ A CERTIFIKACI, a.s.
třída Tomáše Bati 299, 764 21 Zlín – Louky
TESTING LABORATORY - TESTING DIVISION

issues

A TEST

No. 412403260

for the sample:

Close and touch fasteners KOH-I-NOOR
standard variant, material composition 100% polyamide, color black and white

client:

KOH-I-NOOR a.s.
Vršovická 478/51, 101 01 Praha 10 - Vršovice

The selected health safety indicators – pH value of water extract, formaldehyde content, primary aromatic amines content, extractable heavy metals content (Cd, Pb, Hg, As, Cr, Co, Cu, Ni) in acid and alkaline perspiration extract, color fastness to acid and alkaline perspiration, color fastness to dry and wet rubbing, saliva and perspiration resistance, odor

meets the requirements laid down in the document:

Czech Republic Ministry of Health's Decree No. 84/2001 as amended on hygienic requirements for toys and products for children under 3 years of age

This Atest has been issued on the basis of the Test Report No. 412403160/02 issued on 8. 10. 2015 in Institute for testing and certification a.s. Zlín.



Date of issue: 1. 11. 2015
Atest is valid to: 2. 11. 2018

Dipl. Ing. Jiří Samsoněk, Ph.D.
Head of Testing Laboratory

Conditions for use of the Atest and associated information:

- 1. The Atest applies only to the sample tested by our laboratory.*
- 2. The Atest remains in effect until production technology, initial materials and standards or corresponding regulations are changed; however, its validity will extend beyond the period of its effect.*
- 3. If further requirements of national or EU legal regulations apply to the product, the Atest does not replace procedures and documents necessary for assessment of compliance with these regulations.*



ATEST

No. 412403260

The sample indicates the following technical parameters:

Characteristics measured ⁶⁾	Unit	Test results ¹⁾	Uncertainty ²⁾	Required value ³⁾
pH value of water extract	–	6,3 - 6,4	0,1	4,0 – 7,5
Formaldehyde content	mg/kg	undetected ⁴⁾	–	max. 30
Primary aromatic amines content	mg/l ⁵⁾	< 0,05	–	≤ 0,05
Extractable heavy metals content in acid perspiration extract				
cadmium Cd	mg/kg	< 0,10	–	≤ 0,10
lead Pb		< 0,20	–	≤ 0,20
mercury Hg		< 0,02	–	≤ 0,02
arsenic As		< 0,10	–	≤ 0,2
cobalt Co		< 0,10	–	≤ 1,0
nickel Ni		< 0,10	–	≤ 1,0
copper Cu		< 0,10	–	≤ 25,0
chromium Cr		< 0,10	–	≤ 1,0
Extractable heavy metals content in alkaline perspiration extract				
cadmium Cd	mg/kg	< 0,10	–	≤ 0,10
lead Pb		< 0,20	–	≤ 0,20
mercury Hg		< 0,02	–	≤ 0,02
arsenic As		< 0,10	–	≤ 0,2
cobalt Co		< 0,10	–	≤ 1,0
nickel Ni		< 0,10	–	≤ 1,0
copper Cu		< 0,10	–	≤ 25,0
chromium Cr		< 0,10	–	≤ 1,0
Color fastness to acid perspiration				
colour change	grey scale			
staining – cotton / polyamide	degree	5	–	min. 3-4
		5 / 5	–	min. 3-4
Color fastness to alkaline perspiration				
colour change	grey scale			
staining – cotton / polyamide	degree	5	–	min. 3-4
		5 / 5	–	min. 3-4
Color fastness to rubbing				
wet	grey scale			
dry	degree	5	–	min. 4
		5	–	min. 2-3
Saliva and perspiration resistance	–	resistance	–	resistance
Odor	–	typical for material	–	typical for material

¹⁾ detection limit is marked with symbol <

²⁾ expanded uncertainty for coverage factor k = 2, which for a normal distribution corresponds to a coverage probability of approximately 95%

³⁾ requirements of Czech Republic Ministry of Health's Decree No. 84/2001 as amended on hygienic requirements for toys and products for children under 3 years of age

⁴⁾ test result less than 16 mg/kg

⁵⁾ mg of aniline hydrochloride / 1 litre of extract solution

⁶⁾ formaldehyde content, primary aromatic amines content, pH value of water extract and odor were carried out on both submitted colors of the close and tooth fasteners separately. The other parameters were carried out on a type representative of a black color.

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