



INSTITUTE FOR TESTING AND CERTIFICATION

třída Tomáše Bati 299, Louky, 763 02 Zlín, Czech Republic

FINAL REPORT

No 353301455-1/2018

Applicant : **METRIE spol. s.r.o.**
Moravičanská 20/19
789 83 Loštice

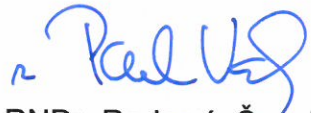
Product : **CHILDREN'S SCHOOL RULER**
- digital printing + pattern coating
(specification on the page 2)

Manufacturer: **METRIE spol. s.r.o.**
Moravičanská 20/19
789 83 Loštice

Assessed by : Bc. Božena Bilíková 

Issued on : 2018-02-26




RNDr. Radomír Čevelík
Vice Chairman of the Board

1. Product specification and requested service

The client – company **METRIE spol. s.r.o., Moravičanská 20/19, 789 83 Loštice** – has applied for the assessment of conformity of the following Products with the requirements of the relevant regulations:

Table1:

ITC's sample registration No.	Applicant's code and name of the product	Applied materials / colours
BB 1462	Children's school ruler – digital printing + pattern coating	Natural wood with multicolor printings – digital printing + pattern coating (210 x 30 x 3) mm

1.1. Color picture of the product



Children's school ruler – digital printing+pattern coating, sample No. BB 1462

2. Conformity of product properties with specified regulations

2.1. Specified regulations

Document	
ČSN EN 71-3+A1:2015	Safety of toys – Part 3: Migration of certain elements

2.2. Indicators of essential properties, Test methods

- Chemical properties
- migration of certain elements by ICP-MS method according to ČSN EN 71-3+A1
 - migration of hexavalent chromium by LC- ICP-MS method according to ČSN EN 71-3+A1



2.3. Place and method of sampling

The samples were delivered by the client. They were taken in compliance with Institute for Testing and Certification's instructions by random selection of representative samples from the goods delivered.

2.4. Place and date of tests

Tests of the specified properties were conducted in the Accredited Laboratory No. 1004 of the Institute for Testing and Certification, a.s., Zlín, Czech Republic.

2.5. Test results and their comparison with the requirements

2.5.1. Chemical properties - Migration of certain elements according to ČSN EN 71-3+A1:2015

The particular values of results of migration test are given in the following table reports results. In all cases it was the printed wood and varnish and of these limits are applied the limit specified in the third column of Tables. Information following the sign "<" represents the actual detection limit achieved in a particular lab, and means "a substance not detected."

Table 2.5.1 Migration of certain elements
Children's school ruler (digital printing+pattern coating), sample No. BB 1462

Element	Migration limit (mg/kg)	Identified value (mg/kg)
	Scrapped- of material of toy	Children's school ruler – natural wood with multicolor printings (digital printing+pattern coating), sample No. BB 1462
Aluminium (Al)	70 000	< 20,0
Antimony (Sb)	560	< 0,50
Arsenic (As)	47	< 0,50
Barium (Ba)	18 750	< 20,0
Boron (B)	15 000	< 5,0
Cadmium (Cd)	17	< 0,20
Chromium (Cr)	-	< 0,50
Chromium III (CrIII)	460	< 0,50 ^{a)}
Chromium VI (CrVI)	0,2	< 0,005
Cobalt (Co)	130	< 0,50
Copper (Cu)	7 700	< 5,0
Lead (Pb)	160	< 0,50
Manganese (Mn)	15 000	< 5,0
Mercury (Hg)	94	< 0,50
Nickel (Ni)	930	< 0,50
Selenium (Se)	460	< 0,50
Strontium (Sr)	56 000	< 5,0



Element	Migration limit (mg/kg)	Identified value (mg/kg)
	Scrapped- of material of toy	Children´s school ruler – natural wood with multicolor printings (digital printing+pattern coating), sample No. BB 1462
Tin total (Sn)	180 000	< 0,20
Organic Tin (Sn org.)	12	< 0,20 ^{b)}
Zinc (Zn)	46 000	< 20,0

Notes to table 2.5.1

a) Meet the limits value is given by the total contain of chromium in the sample

b) Meet the limits value is given by the total contain of tin in the sample according to EN 71-3

The results have been taken from the Document D2 – see Chapter 4.

3. Conclusion

The assessed Products – **Children´s school ruler – digital printing+pattern coating** (as specified in Table 1) – comply with the technical regulations quoted in Table 2.

4. List of related documents

D1 Application No 353301455 submitted on 2018-01-24

D2 Report of Accredited laboratory No. 353301455/2 from February 19, 2018