



INSTITUTE FOR TESTING AND CERTIFICATION

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

FINAL REPORT

Ref. No. 353301330/2016

Client: **Zemědělské družstvo Haňovice**
Haňovice 18
783 21 pošta Chudobín
Czech Republic

Product: Filament
Type: 1,75 PLA yellow-green colour

Assessed by: Dipl. Ing. Ludmila Antošová

A handwritten signature in blue ink, appearing to read 'L. Antošová', is written over the printed name.

Issued on: 2016-10-17



A handwritten signature in blue ink, appearing to read 'Pavel Vaněk', is written over the printed name.

Dipl. Ing. Pavel Vaněk
Head of the Certification Department

1. Product specification and requested service

The client - **Zemědělské družstvo Haňovice, Haňovice 18,783 21 pošta Chudobín, Czech Republic** - ordered the estimation of the tests of the following samples:

Table 1.

ITC's sample registration No.	Name of the product	Specifications
A 5147	Filament Type: 1,75 PLA yellow-green colour	

2. Conformity of product properties with specified regulation

2.1 Specified regulations

Table 2.

Document	
EN 71-3+A1:2014	Safety of Toys: Migration of certain elements

2.2. Place and method of sampling

The samples were delivered by the client. They were taken in compliance with ITC's instructions by random selection of representative samples from the goods delivered.

2.3. 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.



2.4. Test results and their comparison with the requirements

Table I. Sample A 5147

Element	Limit (mg/kg)			
	Dry toy material	Sticky toy material	Scrapped- of material of toy	Filament yellow-green color
Aluminium (Al)	5 625	1 406	70 000	< 20,0
Antimony (Sb)	45	11,3	560	< 0,50
Arzenic (As)	3,8	0,9	47	< 0,50
Barium (Ba)	1 500	375	18 750	< 20,0
Boron (B)	1 200	300	15 000	< 5,0
Cadmium (Cd)	1,9	0,5	23	< 0,20
Chromium (Cr – total)	-	-	-	< 0,20
Chromium (Cr III)	37,5	9,4	460	< 0,20
Chromium (Cr VI)	0,02	0,005	0,2	< 0,005
Cobalt (Co)	10,5	2,6	130	< 0,005
Copper (Cu)	622,5	156	7 700	< 0,50
Lead (Pb)	13,5	3,4	160	< 0,50
Manganese (Mn)	1 200	300	15 000	< 5,0
Mercury (Hg)	7,5	1,9	94	< 5,0
Nickel (Ni)	75	18,8	930	< 0,50
Selenium (Se)	37,5	9,4	460	< 0,50
Strontium (Sr)	4 500	1 125	56 000	< 0,50
Tin total (Sn)	15 000	3 750	180 000	< 5,0
Zinc (Zn)	0,9	0,2	12	<0,20

3. Conclusion

Sample - Filament Type: 1,75 PLA yellow-green colour (as listed in Table 1) – complied with the technical regulations quoted in Table 2.

4. List of related documents

- Application No. 353301330 from 2016-09-05
- Test report of Accredited Testing Laboratory No. 353301330 from 2014-10-14

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