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LABORATORY OF MATERIAL
ENGINEERING AND ENVIRONMENT



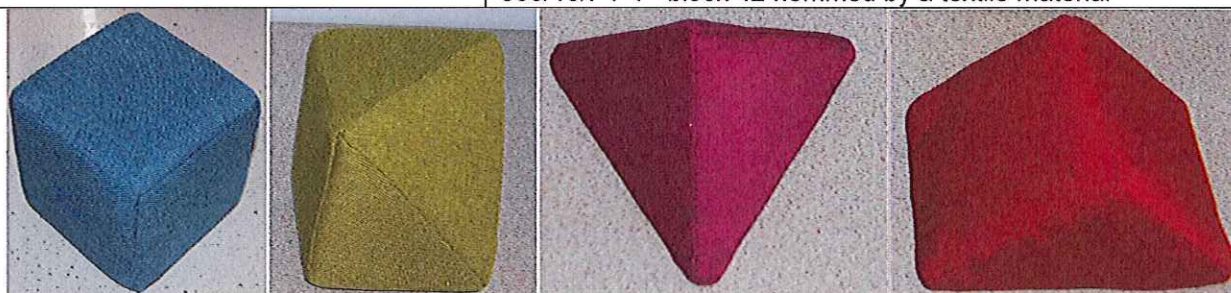
AB 910

REPORT No. 536/DLS/2015

Testing the mechanical and physical properties as well as flammability of
"JollyHeap" blocks toy, delivered for testing by "JollyHeap" Svitlana Sapunova

Orderer: "JollyHeap" Svitlana Sapunova Project No: UP/DLS-19672/OR
ul. Kawalerzystów 8 lok. 5
53-004 Wrocław, Poland

Name of tested object	Sample of "JollyHeap" blocks toy
Orderer markings:	JollyHeap
Number of sample according to R-DLS/7:	536/15/P1 - JollyHeap" blocks toy 536/15/P1-1 - block 41 hemmed by a textile material 536/15/P1-2 - block 32 hemmed by a textile material 536/15/P1-3 - block 31 hemmed by a textile material 536/15/P1-4 - block 42 hemmed by a textile material



Date of delivery of the object for testing: 28.09.2015
Date of beginning the tests / tests completion: 30.09.2015 / 30.10.2015
Place of testing: Laboratory of Material Engineering and Environment

Sample number	Conformity / nonconformity with the requirements	
PN-EN 71-1:2015-01 Standard “Safety of toys. Part 1. Mechanical and physical properties”		
536/15/P1	item 4.1 General requirements. Material cleanliness	+
	item 4.23.2 General requirements. Magnets. Toys other than magnetic/electrical experimental sets intended for children over 8 years, point b)	+
	item 5.2 Toys intended for children under 36 months. Soft-filled toys and soft-filled parts of a toy, point a), b), c)	+
PN-EN 71-2+A1:2014-06 Standard “Safety of toys. Part 2. Flammability”		
536/15/P1	item 4.1 Requirements. General requirements	+
	item 4.5 Requirements. Soft-filled toys	+

signs: "+" – conform to the requirements "-" – not conform to the requirements

Note: Confirmation of conformity with the requirements is based on a confidence level of 95% for the expanded uncertainty of measurement results on which the decision of conformity is based.

Leader of testing team:

Robert Wojtynek, M.Sc. Eng.

/ name /

/ signature /

Members of testing team:

Bożena Rakwicz, Ph.D. Eng.

/ name /

Authorized by:

Beata Gryniewicz-Bylina,
Ph.D., Prof. at KOMAG

/ name /

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Approved by

Kierownik Laboratorium
Inżynierii Materiałowej i Środowiskadr hab. inż. Beata Grynkiewicz
prof. nadzw. ITG KOMAG

Gliwice, 30.10.2015

/ signature and stamp /

TEST REPORT INCLUDES ONLY THE RESULTS, WHICH ARE RELATED TO THE TESTED OBJECT.
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Description of sample

Dimensions:	name of toy: length x width x height:
	block 41 hemmed by a textile material: 120 mm x 120 mm x 120 mm
	block 32 hemmed by a textile material: 120 mm x 120 mm x 120 mm
	block 31 hemmed by a textile material: 155 mm x 135 mm x 70 mm
	block 42 hemmed by a textile material: 165 mm x 120 mm x 90 mm

Sample of JollyHeap blocks toy consists of the following four blocks: cubical block hemmed by a textile material 41, cubical block with cut wall hemmed by a textile material 32, block of triangle shape hemmed by a textile material 31, block of triangle shape hemmed by a textile material 42. Blocks, according to the orderer, are made of PUR T-30 foam. Inside the block corners there are magnets N38 D10x3mm Ni-Cu-Ni, stuck by RiverPlast Igar.

The sample was taken and delivered for testing by the Orderer with foil bag packaging.

Range and methods of testing

Item	Tested parameters	Testing methods	Standard:
1.	tensile strength	tension test with force (70.0±1.0)N	PN-EN 71-1:2015-01: item 8.4.2.2 point b)
2.	attraction of magnets	testing the magnets attraction	item 8.34
3.	flammability of soft-filled toys	flammability tests of soft-filled toys	PN-EN 71-2+A1:2014-06: item 5.5

Note: measurement uncertainty U is an extended uncertainty at confidence level 95% and coverage factor k=2, according to the general instruction IO-DLS/03.

The tested toy has the packaging in a foil bags destroyed during opening, which is not subjected to the requirements according to item 6 of the PN-EN 71-1:2015-01 Standard

Test results

During testing the mechanical and physical properties the condition of toy, sample 536/15/P1, did not change.

Due to the character of tests, the cardboard sample (No. 536/15/P1) during flammability tests was destroyed.

Item	Sample name	Sample number	Name of test	Test result
Results of testing the mechanical and physical properties for conformity with the requirements of the PN-EN 71-1:2015-01 Standard				
1.	"JollyHeap " blocks	536/15/P1	torque test of seams	during the tests no openings appeared in a seam and in a covering material to which it is possible to insert A probe and the rod of diameter 12 mm
2.			testing the attraction of magnets	during the test the magnet detached from the nickel disc
Testing the flammability for compliance with the requirements of the 71-2+A1:2014-06 Standard				
3.	"JollyHeap " blocks	536/15/P1-1	flammability tests of soft-filled toys	speed of flame propagation is (12±1) mm/s
4.		536/15/P1-2		speed of flame propagation is (12±1) mm/s
5.		536/15/P1-3		speed of flame propagation is (13±1) mm/s
6.		536/15/P1-4		speed of flame propagation is (13±1) mm/s

Note: measurement uncertainty U is an extended uncertainty at confidence level 95% and coverage factor k=2, according to the general instruction IO-DLS/03.

The results and their uncertainty refer only to the tested sample and do not refer to the product batch/ substance/ material the sample was taken from.

Copies – 2

"JollyHeap" Svitlana Sapunova x 1

KOMAG x 1

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