



Produktprüfung
Zertifizierung
Qualitätssicherung

ECO
INSTITUT

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Akkreditiert ISO/IEC 17025

 Akkreditierung: AKS-PL-20708
Verzeichnis: www.aks-hannover.de
Staatliche Akkreditierungsstelle Hannover



TEST REPORT No. 20336-6-15

Description of sample:	blue baby sling with stripes without description
Kind of sample:	baby sling
Client:	Didymos Erika Hoffmann GmbH, Ludwigsburg
Sampling:	by client
Arrival of sample at the:	18 December 2008
Date:	13 January 2009
Page:	1
Number of pages:	6
Test program:	According to the guidelines of the International Association Natural Textile Industry (IVN): <ul style="list-style-type: none">• Formaldehyde• pH-Value• Organotin-compounds• Azo dye• Heavy metals (Eluat) *• Resistance to artificial saliva and sweat *
Testing laboratory:	ECO-INSTITUT GmbH except * * subcontracted

Material composition:

<i>Internal sample-no.</i>	<i>Sample description by client</i>	<i>Tested material</i>
20365-6	striped baby sling	blue fabric
20365-7		light pink fabric
20365-8		orange fabric
20365-9		royal blue fabric
20365-10		light green fabric
20365-11		pink fabric
20365-12		light pink fabric
20365-13		navy blue fabric
20365-14		dark green fabric
20365-15		yellow fabric

Formaldehyde

Mixed sample 20365-6-15

<i>Parameter</i>	<i>Result [mg/kg]</i>	<i>Orientation value [mg/kg]</i>
Formaldehyde	< 20	≤ 20

< = below assessment value

Assessment value: 20 mg/kg

IVN-Orientation value: 20 mg/kg

Test method: DIN EN ISO 14184-1.

pH-Value

Mixed sample 20365-6-15

<i>Parameter</i>	<i>Value</i>	<i>Orientation value</i>
pH	6,0	4,5 – 9,0 wool 4,5 – 8,0 other textiles

IVN-Orientation value: wool: 4,5 – 9,0, other textiles: 4,5 – 8,0.

Test method: DIN EN 1413.

Note: This report only refers to above described sample. Publishing in parts requires authorization.

Organotin compounds

Mixed sample 20365-6-15

<i>Substance</i>	<i>Content [mg/kg]</i>	<i>Orientation value [mg/kg]</i>
Monobutyltin (MBT)	< 0,1	0,1
Dibutyltin (DBT)	< 0,05	< 0,05
Tributyltin (TBT)	< 0,05	< 0,05

< = below detection limit

Detection limits: MBT: 0,1 mg/kg; others: 0,05 mg/kg

Test method: extraction, modified E-DIN 38407-13, GC/MS-quantification.

Azo dye

Mixed sample 20365-6-9

<i>Result</i>	<i>Azo-dye</i>	<i>Result [mg/kg]</i>	<i>Orientation value [mg/kg]</i>
negative	---	< 30	30

Mixed sample 20365-10-13

<i>Result</i>	<i>Azo-dye</i>	<i>Result [mg/kg]</i>	<i>Orientation value [mg/kg]</i>
negative	---	< 30	30

Mixed sample 20365-14,15

<i>Result</i>	<i>Azo-dye</i>	<i>Result [mg/kg]</i>	<i>Orientation value [mg/kg]</i>
negative	---	< 30	30

Orientation value: < 30 mg/kg

Ref. results: If the sample contains an amine ref. to the german law (LFBG), dated July 20th 1995, it is documented in the column "results".

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negative = Azo dyes banned by the regulation on consumer goods have not been detected in the analyzed sample.

positive = Azo dyes banned by the regulation on consumer goods have been applied upon Manufacture or treatment of the said sample according to the result of analysis.

In case of a result between 25 and 35 mg/kg.

we have to point out, that variations due to method and matrix might occur. Thus a result like that represents a borderline case.

Test method: non extractable dyes (native fibres): in accordance with § 64 LFGB, 82.02-2, in conformity with DIN EN 14362-1

Heavy Metals

Mixed sample 20365-6-9

<i>Metal</i>	<i>Content [mg/kg]</i>	<i>IVN-Orientation value [mg/kg]</i>
Antimony (Sb)	< 0,1	≤ 0,2
Arsenic (As)	< 0,2	≤ 0,2
Lead (Pb)	< 0,1	≤ 0,2
Cadmium (Cd)	< 0,05	≤ 0,1
Chromium total (Cr)	< 1	≤ 1,0
Chromium VI (Cr VI)	< 1	≤ 0,5
Cobalt (Co)	< 1	≤ 1,0
Copper (Cu)	< 1	≤ 25
Nickel (Ni)	< 1	≤ 1,0
Mercury (Hg)	< 0,02	≤ 0,02
Selenium (Se)	< 0,5	≤ 0,4

< not detectable, below detection limit

Detection limits: Hg: 0,02 mg/kg; Cd: 0,05 mg/kg; Pb, Sb: 0,1 mg/kg; As: 0,2 mg/kg; Se: 0,5 mg/kg; Cr VI, Co, Cr, Cu, Ni: 1 mg/kg

Test method: Elution of heavy metals from textiles by acidic perspiration (60 min. at 40 °C).
Quantitative analysis according to DIN 38406-H22/ICP-MS.

Resistance to artificial saliva and sweat

Mixed sample 20365-6-8

<i>Parameter</i>	<i>Result</i>	<i>Orientation value</i>
Resistance to artificial saliva and sweat	Grade 5	Fast ¹

Sample 20365-9

<i>Parameter</i>	<i>Result</i>	<i>Orientation value</i>
Resistance to artificial saliva and sweat	Grade 5	Fast ¹

Mixed sample 20365-11-13

<i>Parameter</i>	<i>Result</i>	<i>Orientation value</i>
Resistance to artificial saliva and sweat	Grade 5	Fast ¹

Mixed sample 20365-14,15

<i>Parameter</i>	<i>Result</i>	<i>Orientation value</i>
Resistance to artificial saliva and sweat	Grade 5	Fast ¹

Demand by IVN: fast

Test method: DIN 53160.

Cologne, 13 January 2009



Dr. rer.-nat. Hans-Ulrich Krieg (Technical manager)

¹ Salvia fastness: „FAST“ for baby and children's clothing

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Assessment

The test result of the sample “blue baby sling with stripes“ corresponds with the guidelines of the International Association Natural Textile Industry (IVN).

Remark: The complete audit according to the IVN-Textile Standard has not been performed.

Cologne, 13 January 2009

A handwritten signature in black ink, appearing to read 'Sarah Fritschen', written in a cursive style.

Sarah Fritschen
(Project manager)