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Erdwind

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TEST REPORT No. FUTYP2016-02105

Test of a toy for ordered parameters

Arrival in lab: 17.02.2016; Period of analysis: 17.02. - 11.03.2016

Lab Director: Kerstin Scharrer

General note: Copying this test report partially is permitted only in agreement with the contracted lab. The tests results refer only to the tested item. This report consists of 8 pages. Test methods marked with * are not listed in our accreditation certificate.

** Subcontracted.

Product description:

Discus



For the test results please refer to next pages

Product description:

Discus

Test order

Test of a toy for mechanical and physical properties acc. EN 71 part 1, flammability acc. to EN 71 part 2, migration of certain elements acc. to EN 71 part 3, migration of certain elements acc. to EN 71 part 3, migration of monomers, plasticizers and solvents acc. to EN 71 part 9, Polycyclic Aromatic Hydrocarbons, Phthalates, total content of Cadmium and Lead, short-chain chlorinated paraffins and colour fastness to saliva & perspiration.

Summary	Results
DIN EN 71-1 (Safety of toys) – Mechanical and physical properties	<i>pass</i> ^a
DIN EN 71-2 (Safety of toys) – Flammability	<i>pass</i>
DIN EN 71-3 (Safety of toys) – Migration of certain elements	<i>pass</i>
DIN EN 71-9 (Safety of toys) – Organic chemical compounds- requirements	<i>pass</i>
Further requirements	<i>pass</i>

^a see Remark

Sample description:

Sample 1:	Neoprene black
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Test results

n.a. = not applicable
n.t. = not tested
n.d. = not determinable (< LoQ)
LoQ= limit of quantification

1. Mechanical and physical properties according to EN 71-1

Test method: DIN EN71-1:2015-02

Clause	Requirements	Results
4	General requirements	
4.1	Material cleanliness	<i>pass</i>
4.17	Projectiles	
4.17.1	General	<i>n.a.</i>
5	Toys intended for children under 36 months	
5.1	General requirements	<i>pass</i>
5.2	Soft-filled toys and soft filled parts of a toy	<i>pass</i>
6	Packaging	<i>n.t.</i>
7	Warnings, marking and instructions for use	
7.1	General	<i>n.t.</i>

The above table details the clauses appropriate to this item. Those clauses not referred to were considered not applicable.

Product description:

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2. Flammability according to EN 71-2

Test method: DIN EN71-2:2014-08

Clause	Requirements	Results
4.1	General	pass
4.2	Toys worn on the head	n.a.
4.3	Toy disguise costumes and toys intended to be worn by the child in play	n.a.
4.4	Toys intended to be entered by a child	n.a.
4.5	Soft filled toys with a piled or textile surface	n.a.

3. Migration of certain elements

3.1 Migration of certain elements -17 Elements- according to EN 71-3

Sampling and extraction according to: DIN EN 71-3:2014-12

Test method: ICP-OES: DIN EN ISO 11885:2009-09 / Hg: DIN EN ISO 17852:2008-04 (AFS)

Test results in mg/kg

Parameter	LoQ	limit value category III	Sample 1
Aluminium	10	70 000	n.d.
Antimony	2	560	n.d.
Arsenic	1	47	n.d.
Barium	10	18 750	n.d.
Boron	10	15 000	n.d.
Cadmium	0.1	17	n.d.
Chromium	0.1	Chromium (III) 460 Chromium (VI) 0.2	n.d.
Cobalt	1	130	n.d.
Copper	10	7 700	n.d.
Lead	1	160 (90) ^y	n.d.
Manganese	10	15 000	n.d.
Mercury	0.5	94	n.d.
Nickel	5	930	n.d.
Selenium	5	460	n.d.
Strontium	10	56 000	n.d.
Tin	1	180 000	n.d.
Zinc	10	46 000	440

^y Reduced German limit based on the judgement of EU General Court dated 14/05/2014

Product description:

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4. Organic chemical compounds in toys according to EN 71-9

4.1 Monomers (migration) according to EN 71-9 (Tab. 2D)

Test method: EN 71-10/11: 2006

Test results in mg/l

Parameter	LoQ	Limit	Sample 1
Acrylamide	0.02	0.02	n.d.
Bisphenol A	0.1	0.1	n.d.
Formaldehyde	0.1	2.5	n.d.
Phenol	1.5	15	n.d.
Styrene	0.1	0.75	n.d.

4.2 Solvents (migration) according to EN 71-9 (Tab. 2E)

Test method: EN 71-10/11: 2006

Test results in mg/l

Parameter	LoQ	Limit	Sample 1
Trichloroethylene	0.002	0.02	n.d.
Dichloromethane	0.01	0.06	n.d.
2-Methoxyethyl acetate	0.05	0.5 (total)	n.d.
2-Ethoxyethanol	0.05		n.d.
2-Ethoxyethyl acetate	0.05		n.d.
Bis-(2-methoxyethyl) ether	0.05		n.d.
2-Methoxypropyl acetate	0.05		n.d.
Methanol	0.5	5	n.d.
Nitrobenzene	0.02	0.02	n.d.
Cyclohexanone	5	46	n.d.
3,5,5-Trimethyl-2-cyclohexene-1-one	0.3	3	n.d.
Toluene	0.2	2	n.d.
Ethylbenzene	0.1	1	n.d.
Xylene (all isomers)	0.2	2 (total)	n.d.

4.3 Plasticizers (migration) according to EN 71-9 (Tab. 2I)

Test method: EN 71-10/11: 2006

Test results in mg/l

Parameter	LoQ	Limit	Sample 1
Triphenyl phosphate	0.03	0.03	n.d.
Tri- <i>o</i> -cresyl phosphate	0.03	0.03	n.d.
Tri- <i>m</i> -cresyl phosphate	0.03	0.03	n.d.
Tri- <i>p</i> -cresyl phosphate	0.03	0.03	n.d.

Product description:

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Further requirements:

5. Colour fastness to saliva and perspiration

Test method: DIN 53 160-1/2: 2010-10

Analysis: DIN EN ISO 105-A03 (Grading after grey scale)

For all the tests -> 5 the best and 1 the worst colour fastness number

	Sample 1
Staining (blotting paper; saliva solution)	5
Staining (blotting paper; perspiration solution)	5

6. Polycyclic Aromatic Hydrocarbons according to US-EPA + 2 Polycyclic Aromatic Hydrocarbons according to EFSA

Test method: AfPS GS 2014:01 PAH

Limit of quantification: 0.1 mg/kg

Test results in mg/kg

Parameter	CAS-No.	Sample 1
1 Naphthalene	91-20-3	0.21
2 Acenaphthylene	208-96-8	n.d.
3 Acenaphthen	83-32-9	0.10
4 Fluorene	86-73-7	n.d.
5 Phenanthrene	85-01-8	n.d.
6 Anthracene	120-12-7	n.d.
7 Fluoranthene	206-44-0	n.d.
8 Pyrene	129-00-0	n.d.
9 Benzo(a)anthracene	56-55-3	n.d.
10 Chrysene	218-01-9	n.d.
Σ11 Benzo(b)fluoranthene + +12 Benzo-j-fluoranthene	205-99-2 + 205-82-3	n.d.
13 Benzo(k)fluoranthene	207-08-9	n.d.
14 Benzo(a)pyrene	50-32-8	n.d.
15 Indeno(1,2,3-cd)pyrene	193-39-5	n.d.
16 Dibenzo(a,h)anthracene	53-70-3	n.d.
17 Benzo(ghi)perylene	191-24-2	n.d.
18 Benzo-e-pyrene	192-97-2	n.d.
Sum		0.21^b

^b Only contents of 0.2 mg/kg or above were used for summation.

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7. Phthalates according to EC Regulation 1907 / 2006 (REACH) Annex XVII No. 51 & 52 including Di-isobutylphthalate

Test method: PV_C_01.15.02

Limit of quantification: 0.005% / ^d0.01%

Test results in %

Parameter	Abbrev.	CAS-No.	Limit	Sample 1
Dibutylphthalate	DBP	84-74-2	0.1% (sum)	n.d.
Benzylbutylphthalate	BBP	85-68-7		n.d.
Bis-(2-ethylhexyl)phthalate	DEHP	117-81-7		n.d.
Di-n-octylphthalate	DNOP	117-84-0	0.1% (sum)	n.d. ^d
Di-isononylphthalate	DINP	68515-48-0		n.d.
Di-isodecylphthalate	DIDP	26761-40-0		n.d.
Di-isobutylphthalate	DIBP	84-69-5	--	n.d.

8. Total Cadmium content according to EC Regulation 1907 / 2006 (REACH) Annex XVII No. 23 and total Lead content

Test method: micro wave digestion (HNO₃/H₂O₂) / ICP-MS DIN EN 17294-2

Limit of quantification: ^e5 mg/kg / ^f10 mg/kg

Test results in mg/kg

	Limit	Sample 1
Cadmium (Cd) ^e	100	n.d.
Lead (Pb) ^f	100 ¹	n.d.

¹ Limit according to US CPSIA 2008

9. Short-chain chlorinated paraffins (C₁₀₋₁₃)

Test method: GC/ECD*

Limit of quantification: 100 mg/kg

Test results in mg/kg

	Limit	Sample 1
Short-chain chlorinated paraffins (C ₁₀₋₁₃)	1500	n.d.

Product description:

Discus

Conclusion

The presented product "**Discus**" was tested for children below 36 Month of age. The product conforms to the requirements of the applied regulation regarding the tested parameter.

Remark

Packaging was not provided during testing. The labelling was not tested. The CE-Mark, the name and address of the manufacturer were not found on the product.

Intertek Consumer Goods GmbH



Prüfleitung / Lab Manager

K. Enser, K. Grönhardt, C. List, P. Malik,
 M. Neumeister, T. Ruoff, K. Scharrer, M. Tutsch

Product description:

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Remark

Requirements acc. to. AfPS GS 2014:01 PAH / 1907/2006, Annex XVII No. 50

Parameter	Category 1	Category 2		Category 3		Limit value acc. to EC regulation 1907/2006, Anhang XVII No. 50 (will be enforced 12/2015)	
		Toys acc. to Directive 2009/48/EC	other products acc.to ProdSG	Toys acc. to Directive 2009/48/EC	other products acc.to ProdSG		
	Materials which come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use	Materials, not covered by category 1, for intended skin contact of more than 30 s or repeated short-term skin contact		Materials, not covered by category 1 or category 2, with foreseeable skin contact up to 30 seconds (short term skin contact)		Toys, including activity toys, and childcare articles – Components rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of us	Articles shall not be placed on the market for supply to the general public, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of us
Benzo[a]pyrene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	0.5 mg/kg	1 mg/kg
Benzo[e]pyrene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	0.5 mg/kg	1 mg/kg
Benzo[a]anthracene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	0.5 mg/kg	1 mg/kg
Benzo[b]fluoranthene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	0.5 mg/kg	1 mg/kg
Benzo[j]fluoranthene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	0.5 mg/kg	1 mg/kg
Benzo[k]fluoranthene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	0.5 mg/kg	1 mg/kg
Chrysene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	0.5 mg/kg	1 mg/kg
Dibenzo[a,h]anthracene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	0.5 mg/kg	1 mg/kg
Benzo[ghi]perylene mg/kg	< 0.2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	-	-
Indeno[1'2,3-cd]pyrene mg/kg	< 0,2 mg/kg	< 0.2 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 1 mg/kg	-	-
Acenaphthylene, Acenaphthen, Fluorene, Phenanthrene, Pyrene, Anthracene, Fluoranthene, mg/kg	< 1 mg/kg – Sum	< 5 mg/kg – Sum	< 10 mg/kg – Sum	< 20 mg/kg – Sum	< 50 Sum	-	-
Naphthalene mg/kg	< 1 mg/kg	< 2 mg/kg		< 10 mg/kg		-	-
Sum 18 PAH	<1 mg/kg	< 5 mg/kg	< 10 mg/kg	< 20 mg/kg	< 50 mg/kg	-	-
Evaluation	pass	pass	-	pass	-	pass	-

***** End of Report *****