

Intertek Consumer Goods GmbH · Würzburger Straße 152 · 90766 Fürth · Germany

KATASKEVES DAPEDON LTD - KDF
MRS. Maria Nikolaidoy
Mitropoleos 19
54024 Thessaloniki
GREECE

Fürth, May 6/2020

TEST REPORT No. FUTYP2020-02592

Date sample received: March 31/2020
Period of testing: April 03/2020 – May 05/2020
Technical Director: Kerstin Scharrer

Sample description: Aliphatic Binder 1125, Component A + B



For the test results please refer to next pages

Test order

Test of products for migration of certain elements acc. to EN 71 part 3 and polycyclic aromatic hydrocarbons

Summary	Results
DIN EN 71-3 (Safety of toys) – Migration of certain elements	<i>pass</i>
Further requirements	<i>pass</i>

Sample description:

No. 1:	Binder A
No. 2:	Binder B

Test results

Abbreviations:

n.d. = not determinable (< LoQ)

LoQ = limit of quantification

CS = Combined sample

1. Migration of certain elements

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

Sampling, extraction: DIN EN 71-3:2019-08

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

Test results in mg/kg

Parameter	LoQ	limit category III	Sample No. 1	Sample No. 2
Aluminium	10	70 000 (28 130) ^y	n.d.	n.d.
Antimony	2	560	n.d.	n.d.
Arsenic	1	47	n.d.	n.d.
Barium	10	18 750	n.d.	n.d.
Boron	10	15 000	n.d.	n.d.
Cadmium	0.1	17	n.d.	n.d.
Chromium (III)	3	460	n.d.	n.d.
Cobalt	1	130	n.d.	n.d.
Copper	10	7 700	n.d.	n.d.
Lead	0.5	23	n.d.	n.d.
Manganese	10	15 000	n.d.	n.d.
Mercury	0.5	94	n.d.	n.d.
Nickel	5	930	n.d.	n.d.
Selenium	2	460	n.d.	n.d.
Strontium	10	56 000	n.d.	n.d.
Tin	3	180 000	n.d.	n.d.
Zinc	10	46 000	n.d.	n.d.

^y new limit for Aluminium valid as of May 20th, 2021; see directive (EU) 2019/1922

1.2 Migration of certain elements -Chromium VI- according to DIN EN 71-3

Sampling, extraction: DIN EN 71-3:2019-08
Measurement IC- Matrix Elimination

Test results in mg/kg

	LoQ	limit category III	Sample No. 1	Sample No. 2
Chromium VI	0.01	0.053	0.01	0.01

Further requirements:

2. Polycyclic Aromatic Hydrocarbons according to US-EPA+ 2 EFSA PAH and according to Regulation (EC) No. 1907/2006 (REACH) Annex XVII No. 50

Test method: AfPS GS 2019:01 PAK (2019-05)
Limit of quantification: 0.1 mg/kg

Test results in mg/kg

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

^a For summation according to AfPS GS 2019:01 PAK the following PAH are not included: Acenaphthylene, Acenaphthene, Fluorene

^b Only contents from 0.2 mg/kg were used for summation.

Conclusion

The presented products **“Aliphatic Binder 1125, Component A + B”** conforms to the requirements of Polycyclic Aromatic Hydrocarbons according to Regulation (EC) No. 1907/2006 (REACH) Annex XVII No. 50 and the requirements of DIN EN 71-3 category III when dried.

Remark

Requirements acc. to AfPS GS 2019:01 PAK (Utilization for GS-mark from July 1st, 2020) and Regulation (EC) No. 1907/2006, Annex XVII No. 50

Parameter	Category 1	Category 2		Category 3		Limit value acc. to EC regulation 1907/2006, Annex XVII No. 50	
		a. Use by children	b. other consumer products	a. Use by children	b. other consumer products	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 use	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 use
Benzo[a]pyrene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1		
Benzo[e]pyrene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1	0.5	1
Benzo[a]anthracene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1	0.5	1
Benzo[b]fluoranthene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1	0.5	1
Benzo[j]fluoranthene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1	0.5	1
Benzo[k]fluoranthene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1	0.5	1
Chrysene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1	0.5	1
Dibenzo[a,h]anthracene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1	0.5	1
Benzo[ghi]perylene mg/kg	< 0.2	< 0.2	< 0.5	< 0.5	< 1	-	-
Indeno[1,2,3-cd]pyrene mg/kg	< 0,2	< 0.2	< 0.5	< 0.5	< 1	-	-
Phenanthrene, Pyrene, Anthracene, Fluoranthene, mg/kg	< 1 – Sum	< 5 – Sum	< 10 – Sum	< 20 – Sum	< 50 – Sum	-	-
Naphthalene mg/kg	< 1	< 2		< 10		-	-
Sum 15 PAH mg/kg	<1	< 5	< 10	< 20	< 50	-	-
Evaluation	pass	pass	pass	pass	pass	pass	pass

General note:

This report has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Intertek being obtained. Intertek accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm his agreement to indemnify Intertek for all loss or damage resulting therefrom. Intertek accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.

We would like to point out, that Intertek can't provide legally binding assessments referring to isolated cases. The individual legal advice in Germany is reserved to the legal advisory professions and a binding interpretation is subject to the court of justice.

Copying excerpts or otherwise reproducing parts of the test report is permitted only with the consent of the laboratory accepting the order. This report pertains only to the test item(s).

All testing requests are subject to our Terms and Conditions available on www.intertek.com.

END OF REPORT