

CONSUMER PRODUCTS SERVICES DIVISION

LIFETIME PRODUCTS INC

June 17, 2020 **Technical Report:** (8520)139-0530 Date Received: May 18, 2020 Page 1 of 41

MELINDA COLE LIFETIME PRODUCTS INC FREEPORT CENTER BLDG, D12 CLEARFIELD, UT 84016-0010 **UNITED STATES**

Sample Description: TEETER TOTTER ACE FLYER PRIMARY

Vendor: N/A Sample Size: Style No(s): Manufacturer: DONGGUAN L'S GIANT METAL 151110

PRODUCTS CO. LTD/LONKA

INDUSTRIAL CO. LTD

LIFETIME PRODUCTS INC. SKN/SKU No.: N/A Buyer: Labeled Age Grade: **AGES 3 TO 10** PO No.: N/A Appropriate Age Grade: **NOT REQUESTED** Ref #: N/A Client Specified Age **3-10 YEARS** Country of Origin: **CHINA**

Grade:

Tested Age Grade: FROM 3 TO 10 YEARS OF AGE

Assortment No.: N/A UPC Code: 875655002422 Country of Destination: **EUROPE**

Test Starting Date: MAY 18, 2020 Test Finished Date:

EXECUTIVE SUMMARY:

The sample(s) MEET the following requirement(s):

- Labeling requirements of "CE marking, manufacturer/ Importer name and address, and product identification" under "Directive 2009/48/EC Safety of Toy".
- The mechanical and physical properties requirements of the tested subclauses of the European Standard, "Safety of toys", EN71: Part 1:2014+A1:2018, clauses 1-7.
- The flammability requirements of the European Standard "Safety of Toys", EN 71: Part 2: 2011+ A1: 2014.
- The migration of certain elements in Category III Scraped off toy material requirements of the European Standard, "Safety of Toys", EN 71 Part 3: 2019.
- The heavy metals requirements of the European "Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.'
- The BBP, DBP DEHP and DIBP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 51 (amended up to EU No. 2018/2005).
- The BBP, DBP and DEHP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 51.



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EXECUTIVE SUMMARY:

The sample(s) MEET the following requirement(s):

- The cadmium content requirement of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 23 (amended up to EU No. 2016/217).
- The DNOP, DINP and DIDP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 52.
- The polycyclic aromatic hydrocarbons (PAHs) content requirement of European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 50, Paragraph 5 and 6 and its amendments.
- The labeling requirement of EN 71: Part 8:2018, "Activity toys for domestic use.
- The general mechanical requirement of pr EN 71: Part 8:2018, "Activity toys for domestic use.
- The See-saw mechanical requirement of pr EN 71: Part 8:2018, "Activity toys for domestic use.
- The short chain chlorinated paraffins (SCCPs) content requirement of the European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs) (recast).
- Candidate List of Substances of Very High Concern for authorization published by European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006 concerning REACH.

Note: At the request of the client, the sample(s) was evaluated for use by children 3-10years.

Note: The manufacturer / importer information was present on the packaging only. It has to be noted that, according to TSD 2009/48/EC, the importer shall indicate their name, registered trade name or registered trade mark and the address at which they can be contacted on the toy, or, where that is not possible, on its packaging or in a document accompanying the toy.

BUREAU VERITAS SHENZHEN CO.,LTD

Choy Hon Kwong, Adams Senior Manager Analytical Department BUREAU VERITAS SHENZHEN CO., LTD.

Hon Yin Kan Manager

Toys And Juvenile Products Department

AC/HK/dl

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RESULTS:

APPROPRIATE AGE GRADE DETERMINATION

The Appropriate Age Grade is determined with reference to the EN71: Part 1: 2014 +A1:2018, CEN ISO/TR 8124-8:2016 Safety of toys - Part 8: Age Determination Guidelines prepared by Technical Committee CEN/TC 52 and Age Grade Determination Guidelines of the Consumer Product Safety Commission (CPSC).

Note: The most stringent age grade from the Labeled Age Grade and the Appropriate Age Grade will be

used for testing.

Note: If the client does not specify an age grade for testing or request Bureau Veritas Consumer

Products Services, Inc. to determine an appropriate age grade, the labeled age grade will be used

for testing.

EXPLANATION OF THE ABBREVIATIONS FOR PART 1, 2 & 6

Symbol	Explanation								
NM	The sample(s) DOES NOT MEET the requirement of this Subclause								
M	The sample(s) MEET	the require	ment of this Subclause						
N/A	Not Applicable								
NR	Not Requested								
NE	Not Evaluated								
NT	Not Tested								
NP	None Present								
Р	Present								
R	Refer to Comment Se	ction of this	report						
Symbol	Language Present	Symbol	Language Present	Symbol	Language Present				
В	Belgian language	G	German language	PR	Portuguese language				
D	Danish language	GR	Greek language	S	Spanish language				
Е	English language								
F	Finnish language	I	Italian language	SZ	Swiss language				
FR	French language	N	Norwegian language						



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RESULTS:

MECHANICAL & PHYSICAL PROPERTIES (EN 71: PART 1 – 2014+A1 – 2018)

Subclause	Requirement	Result
4.1	Material cleanliness	M
4.2	Assembly	М
4.3	Flexible plastic sheeting	NA
4.4	Toy Bags	NA
4.5	Glass	NA
4.6	Expanding materials	NA
4.7 & 7.6	Edges	M
4.8 & 7.6	Points and metallic wires	M
4.8e	Splinters	M
4.9	Protruding parts	NA
4.10.1	Folding and sliding mechanisms	NA
4.10.2	Driving mechanisms	NA
4.10.3	Hinges	NA
4.10.4	Springs	NA
4.11	Mouth actuated toys and other toys intended to be put in the mouth	NA
4.12 & 7.3	Balloons	NA
4.13 & 7.9	Cord of toy kites and other flying toys	NA
4.14.1	Toys which a child can enter	NA
4.14.2 & 7.8	Masks and helmets	NA
4.15.1	Toys propelled by child	
4.15.1.2 & 7.10.1 & 7.10.2 & 7.10.3 & 7.10.4 & 7.16	Toys propelled by child – Instructions for use	NA
4.15.1.3	Toys propelled by child – Strength	NA
4.15.1.4	Toys propelled by child – Stability	NA
4.15.1.5	Toys propelled by child – Braking	NA
4.15.1.6	Toys propelled by child - Transmission	NA
4.15.1.7	Toys propelled by child – insertion mark	NA
4.15.1.8	Electrically-driven ride-on toys	NA
4.15.2	Toy bicycles	
4.15.2.2 & 7.15	Toy bicycles – Warnings and instructions for use	NA
4.15.2.3	Toy bicycles – Braking	NA
4.15.3 & 7.16 & 7.19	Rocking horses and similar toys	NA
4.15.4 & 7.16	Toys not propelled by child	M
4.15.5 & 7.18	Toy scooters	NA
4.16	Heavy immobile toys	NA
4.17.2	All projectiles	NA
4.17.3 & 7.7	Projectile toys with stored energy	NA
4.17.4 & 7.26	Certain projectiles toys without stored energy	NA
4.18 & 7.4	Aquatic toys and inflatable toys	NA



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RESULTS:

MECHANICAL & PHYSICAL PROPERTIES (EN 71: PART 1 – 2014+A1 – 2018)

Subclause	Requirement	Result
4.19 & 7.13 & 7.14	Percussion caps	NA
4.20.2.1- 4.20.2.8, 4.20.2.10, 4.20.2.12	Acoustics	NA
4.20.2.9, 4.20.2.11 & 7.14	Acoustics – percussion toys & cap-firing toys	NA
4.21	Toys containing a non-electrical heat source	NA
4.22 & 7.2	Small balls	NA
4.23	Magnet	
4.23.2 a, b & c	Toy other than magnetic / electrical experimental sets intended for children over 8 years	NA
4.23.3 & 7.20	Magnetic / electrical experimental sets intended for children over 8 years	NA
4.24	Yo-yo ball	NA
4.25	Toys attached to food	NA
4.26	Toy Disguise Costumes	NA
4.27.1	Flying toys – General	NA
4.27.2 & 7.25.1	Rotors and propellers on flying toys	NA
4.27.3 & 7.25.2	Rotors and propellers on remote controlled flying toys	NA
	FOR TOYS INTENDED FOR CHILDREN UNDER 36 MONTHS	
5.1	General	NA
5.1a	Small parts – as received	NA
5.1b	Small parts, sharp points, sharp edges – after tests	NA
5.1c	Cross section <2mm metal points & wires	NA
5.1e	Toys contain glue	NA
5.1f	Casing of toys	NA
5.2	Fillings, coverings and seams	NA
5.3	Adhesion of plastic sheeting	NA
5.4.2	Cords and chains in toys intended for children under 18 months	NA
5.4.3 & 7.22	Cords and chains in toys intended for children of 18 months or over but under 36 months	NA
5.4.4	Fixed loops, tangled loops and nooses	NA
5.4.5	Cords and chains on pull along toys	NA
5.4.6 & 7.21	Electrical cables	NA
5.4.7	Cross-sectional dimension of certain cords	NA
5.4.8	Self-retracting cords	NA
5.4.9 & 7.11 & 7.23	Toys attached to or intended to be strung across a cradle, cot or perambulator	NA
5.5 & 7.12	Liquid filled toys	NA
5.6	Electrically driven toys	NA
5.7	Glass and porcelain	NA



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RESULTS:

MECHANICAL & PHYSICAL PROPERTIES (EN 71: PART 1 – 2014+A1 – 2018)

Subclause	Requirement	Result
5.8	Shape and size	NA
5.9 & 7.17	Monofilament fibres	NA
5.10	Small balls	NA
5.11	Play figures	NA
5.12	Hemispheric shaped toys	NA
5.13	Suction cups	NA
5.14	Straps intended to be worn fully or partially around the neck	NA
5.15 & 7.24	Sledges with cords for pulling	NA
6	Packaging	M
	WARNINGS, INSTRUCTIONS FOR USE	
7.1	General	NA
7.2	Toys not intended for children under 36 months	NA
7.5	Functional toys	NA

2009/48/EC GENERAL LABELING REQUIREMENT

Requirement	Result
CE Mark	M
Manufacturer/ Importer name and address	M
Product Identification	M

M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section



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RESULTS:

FLAMMABILITY (EN 71 PART 2: 2011 + A1: 2014)

Subclause	Requirement	Result
4.1	Cellulose nitrate	NP
4.1	Surface flash on a piled surface	NA
4.1	Flammable gases	NA
4.1	Extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels	NA
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by child in play	NA
4.3	warning on product and packaging (10 - 30 mm/s)	NA
4.4	Toys intended to be entered by a child	NA
4.4	warning on product and packaging (10 – 30 mm/s)	NA
4.5	Soft-filled toys	NA

REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 2

Sub- clause	Test Method	Sub- clause	Test Method	Sub- clause	Test Method	Sub- clause	Test Method
4.2.2	5.2	4.2.4	5.3	4.3	5.4	4.5	5.5
4.2.3	5.3	4.2.5	5.4	4.4	5.4	-	-



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RESULTS:

Safety of toys – Activity toys for domestic use EN 71 Part 8: 2018

Safety of toys – Activity toys for domestic use EN 71 Part 8: 2018 **Test Method:**

Section	Parameter / Requirement	Result
4.1	General	-
4.1.1	Assembly	М
4.1.2	Static strength	М
4.1.3	Maximum height	M
4.1.4	Corners and edges	M
4.1.5	Protruding parts	NA
4.1.6	Diameter of ropes and other means of suspension	NA
4.1.7	Water accumulation	M
4.2	Barriers, ladders etc	-
4.2.1	Barriers and handrails preventing the child from falling down	NA
4.2.2	Ladders and similar means of access to activity toys	NA
4.3	Entrapment	-
4.3.1	Entrapment of head and neck	M
4.3.2	Entrapment of clothing and hair	NA
4.3.3	Entrapment of feet	NA
4.3.4	Entrapment of fingers	M
4.4	Stability of activity toys other than slides, swings and activity toys with crossbeams, and see-saws	-
4.4.2	Stability of activity toys with a free height of fall of 600 mm or less	NA
4.4.3	Stability of activity toys with a free height of fall of more than 600 mm	NA
4.5	Slides	-
4.5.2	Stability of slides	NA
4.5.3	Retaining sides for slides	NA
4.5.4	Starting, sliding and run-out section on slides	NA
4.6	Swings	-
4.6.1	Stability of swings and other activity toys with crossbeams	NA
4.6.2	Strength of crossbeams, swing devices and suspension connectors	NA
4.6.3	Swings intended for children under 36 months	NA
4.6.4	Minimum clearance between swing elements, and similar equipment and adjacent structures	NA
4.6.5	Lateral stability of swing elements	NA
4.6.6	Minimum clearance between swing elements and the ground	NA
4.6.7	Suspension connectors and swing devices	NA
4.6.8	Swing elements	-
4.6.8.2	Impact from swing elements	NA
4.6.8.3	Geometry and design of swing elements	NA



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RESULTS:

Safety of toys – Activity toys for domestic use EN 71 Part 8: 2018

Test Method: Safety of toys – Activity toys for domestic use EN 71 Part 8: 2018

Section	Parameter / Requirement	Result
4.6.8.4	Falling protection of swings with double seats	NA
4.7	See-saws	-
4.7.1	Stability of see-saws	M
4.7.2	Seat/stand height	M
4.7.3	Restraint of motion	NA
4.7.4	Pinching and crushing of fingers and toes	M
4.7.5	Hand supports	M
4.8	Carousels and rocking activity toys	NA
4.9	Paddling pools	-
4.9.1	Static strength of non-inflatable walls	NA
4.9.2	Paddling pools with inflatable walls	NA
5	Warnings, markings, and instructions	-
5.1	Warnings and markings	-
5.1.1	General	M
5.1.2	Paddling pools	NA
5.2	Assembly and installation instructions	M
5.3	Maintenance	M

M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section



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RESULTS:

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019)

Test Method : European Standard EN 71 Part 3: 2019, Section 9.

Class: Category III - Scraped off toy material

Sample Identity	Color	Location	Style
A.	Deep red coating	Frame	
B.	Deep blue coating	Frame	
C.	Soft blue PVC	Chain	
D.	Yellow plastic	Block	
E.	Red plastic	Block	
F.	Matt blue plastic	Panel	
G.	Matt black soft plastic	Crash pad	
H.	Dull black plastic	End of tube	
I.	Flat black plastic	Coped cap	

	Requirement			Result	(mg/kg)		
Analyte	(mg/kg)			Samp	ole ID		
	Category III	A.	B.	C.	D.	E.	F.
Aluminium (AI)	70000	LT 2					
Arsenic (As)	47	LT 2					
Boron (B)	15000	LT 2					
Barium (Ba)	18750	LT 2					
Cadmium (Cd)	17	LT 2					
Cobalt (Co)	130	LT 2					
Chromium III (Cr III)	460	LT 0.050					
Chromium VI (Cr VI)	0.053	L1 0.050	L1 0.030				
Copper (Cu)	7700	LT 2					
Mercury (Hg)	94	LT 2					
Manganese (Mn)	15000	LT 2					
Nickel (Ni)	930	LT 2					
Lead (Pb)	23	LT 2					
Antimony (Sb)	560	LT 2					
Selenium (Se)	460	LT 2					
Tin (Sn)	180000	LT 2					
Organic tin	12	LT 2					
Strontium (Sr)	56000	LT 2					
Zinc (Zn)	46000	LT 2					
Mass of trace am	Mass of trace amount (gram)		0.0121	-	ı	-	-
Conclus	sion	PASS	PASS	PASS	PASS	PASS	PASS



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RESULTS:

MIGRATION OF CERTAIN ELEMENTS (European Standard EN 71 Part 3: 2019)

Test Method: European Standard EN 71 Part 3: 2019, Section 9.

Class: Category III - Scraped off toy material

	Requirement			Result	(mg/kg)		
Analyte	(mg/kg)			Samp	ole ID		
	Category III	G.	H.	I.	-	-	-
Aluminium (AI)	70000	LT 2	LT 2	LT 2	-	-	-
Arsenic (As)	47	LT 2	LT 2	LT 2	-	-	-
Boron (B)	15000	LT 2	LT 2	LT 2	-	-	-
Barium (Ba)	18750	LT 2	LT 2	LT 2	-	-	-
Cadmium (Cd)	17	LT 2	LT 2	LT 2	-	-	-
Cobalt (Co)	130	LT 2	LT 2	LT 2	-	-	-
Chromium III (Cr III)	460	LT 0.050	LT 0.050	LT 0.050			
Chromium VI (Cr VI)	0.053	L1 0.050	L1 0.050	L1 0.050	-	-	-
Copper (Cu)	7700	LT 2	LT 2	LT 2	-	-	-
Mercury (Hg)	94	LT 2	LT 2	LT 2	-	-	-
Manganese (Mn)	15000	LT 2	LT 2	LT 2	-	-	-
Nickel (Ni)	930	LT 2	LT 2	LT 2	-	-	-
Lead (Pb)	23	LT 2	LT 2	LT 2	-	-	-
Antimony (Sb)	560	LT 2	LT 2	LT 2	-	-	-
Selenium (Se)	460	LT 2	LT 2	LT 2	-	-	-
Tin (Sn)	180000	LT 2	LT 2	LT 2	-	-	-
Organic tin	12	LT 2	LT 2	LT 2	-	-	-
Strontium (Sr)	56000	LT 2	LT 2	LT 2	-	-	-
Zinc (Zn)	46000	LT 2	LT 2	LT 2	-	-	-
Mass of trace am	Mass of trace amount (gram)		-	-	-	-	-
Conclus	sion	PASS	PASS	PASS	-	-	-

mg/kg = milligrams per kilogram (ppm=parts per million)

LT = Less Than

* = Average of duplicate analysis

FR = Failed Result

Organic tin = migration of total organic tin is expressed as tributyl tin cation content in mg/kg

= Verified results (see note)

Remark

- Results of Cr III and Cr VI were reported as sum of soluble Chromium content unless specified.
- Result(s) of organic tin was (were) calculated while assuming the tin content wholly contributed from tributyltin cation unless specified.

Note:

If soluble chromium content or soluble tin content exceeded the screening limits of soluble chromium (VI) or organic tin content, the results were verified by below method

- Chromium VI: EN71 part 3:2019, Annex F
- Organic tin: EN71 part 3:2019, Annex G by Gas Chromatography Mass Spectroscopy analysis.



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RESULTS:

HEAVY METALS PRESENT IN PACKAGING (European Council Directive 94/62/EC on Packaging and Packaging Waste)

Para	meter:	The sum	of lead, cadmium, mercury	y and hexavalen	t chromium	
Maxi	mum Allowable Limit:	- 250 ppn	n by weight after June 30, n by weight after June 30, n by weight after June 30,	1999		
		Sample D	Description		Result	Conclusion
	Color/Compon	ent	Location	Style	(mg/kg (ppm))	
(A)	Black printed white pa	per sticker	Paper sticker		LT 20	PASS
(B)	Green / black printed of paper sticker	dull white	Paper sticker		LT 20	PASS
(C)	Black printed flat white	paper	Instruction		LT 20	PASS
(D)	Black printed white / g board	rey paper	Accessory pack		LT 20	PASS
(E)	Beige paper sticker		Paper tape		LT 20	PASS
(F)	Yellowish green plastic	С	Tie		LT 20	PASS
(G)	Translucent glue		Glue		LT 20	PASS
(H)	Black printed dull clear	r plastic	Bag		LT 20	PASS
(I)	Clear PVC		Blister		LT 20	PASS
(J)	Flat white foam		Wrapper		LT 20	PASS
(K)	Clear laminated black printed bright white pla sticker	•	Warning sticker		LT 20	PASS
(L)	Silvery metal		Staple		LT 20	PASS
(M)	Black / red printed ligh paper board	t brown	Вох		LT 20	PASS

LT = Less Than

mg/kg = milligrams per kilogram (ppm = parts per million)

* = Average of duplicate analyses



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RESULTS:

CADMIUM CONTENT (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 23)

Cate	Category:				Plastics		
Elem	Element:			Cadmium			
Test	Method				BS EN 1122: 20	01, Method	В
Maxi	mum Allowable Limit:				100 mg/kg (0.01	1% by weigh	t)
	Sample D	Description		Reading 1	Reading 2	Average	Conclusion
(Color / Component	Location	Style	ı	Result (mg/kg)		
(A)	Soft blue PVC	Chain		LT 10	#	-	PASS
(B)	Yellow plastic Red plastic Matt blue plastic Matt black soft plastic	Block Block Panel Crash pad		LT 10	#	-	PASS
(C)	Dull black plastic Flat black plastic Flat white plastic Dull translucent plastic	End of tube Coped cap Pin inner panel Inner nut		LT 10	#	-	PASS

LT = Less than mg/kg = milligrams per kilogram (ppm = parts per million) # = Insufficient sample for duplicate Operator: Zhang Shao Zheng, Ryan

analyses

Category:	Paints on Painted Article			
Element:	Cadmium			
Test Method:	In house acid digestion			
Maximum Allowable Limit:	1000 mg/kg (0.1% by weight)			
Test C	Test Component			
Colour/Component Location Style			(mg/kg)	
(A) Deep red coating	Frame		LT 10	PASS

LT = Less than

mg/kg = milligrams per kilogram (ppm = parts per million)

^{* =} Average of duplicate analyses



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RESULTS:

SHORT CHAIN CHLORINATED PARAFFINS (SCCPS) CONTENT (European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs) (recast), Annex I, Part A)

Analyte	Short Chain Chlorinated Paraffins (SCCPs)
Limit (mg/kg)	1500

Anal	yte		SCCPs		
	Sample	Result	Conclusion		
	Color / Component	Location	Style	(mg/kg)	
(A) (B)	Soft blue PVC Yellow plastic Red plastic Matt blue plastic	Chain Block Block Panel		LT 30	PASS
(6)	Matt black soft plastic Dull black plastic	Crash pad End of tube		L1 30	1 700
(C)	Flat black plastic Flat white plastic Dull translucent plastic	Coped cap Pin inner panel Inner nut		LT 30	PASS

LT = Less Than

* = Average of duplicate analyses

mg/kg = milligrams per kilogram (ppm=parts per million)

ND = None Detected (detection limit = 30 mg/kg)

Remark:

Short chain chlorinated paraffins (SCCPs) is also known as alkanes C10-C13, chloro. Plastics and leather of product(s) are applicable to be tested only.



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RESULTS:

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) CONTENT (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 50, Paragraph 5 and 6 and its amendments)

Test Method: With reference to test method mentioned in German AfPS GS 2014:01 PAK

Sample Identity	Test Component	Location	Style
	Composite of		
A.	Deep red coating	Frame	
	Deep blue coating	Frame	
B.	Soft blue PVC	Chain	
C.	Yellow plastic	Block	
	Red plastic	Block	
D.	Matt blue plastic	Panel	
	Matt black soft plastic	Crash pad	
E.	Dull black plastic	End of tube	
	Flat black plastic	Coped cap	



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RESULTS:

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) CONTENT (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 50, Paragraph 5 and 6 and its amendments)

Test Method: With reference to test method mentioned in German AfPS GS 2014:01 PAK

Maximum Allowable Limit:	Туре І	Articles includes amongst others: - sport equipment such as bicycles, golf clubs, racquets - household utensils, trolleys, walking frames tools for domestic use - clothing, footwear, gloves and sportswear - watch-straps, wrist-bands, masks, head-bands 1 mg/kg (Each of all listed PAHs)
	Type II	Toys, including activity toys, and childcare articles 0.5 mg/kg (Each of all listed PAHs)

Tested	Time	Res	Conclusion	
Item(s)	Туре	Detected Analyte(s)	Conc. (mg/Kg)	Conclusion
A.	II	ND	ND	PASS
B.	II	ND	ND	PASS
C.	II	ND	ND	PASS
D.	II	ND	ND	PASS
E.	II	ND	ND	PASS

ND = Not detected

">" = More than

Conc. = Concentration

mg/kg = milligram per kilogram
Detection Limit : Each PAHs 0.2 mg/kg

Remark.

APPENDIX

List of P	List of Polynuclear Aromatic Hydrocarbons:						
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.		
1	Benzo[a]pyrene (BaP)	50-32-8	5	Benzo[b]fluoranthene (BbFA)	205-99-2		
2	Benzo[e]pyrene (BeP)	192-97-2	6	Benzo[j]fluoranthene (BjFA)	205-82-3		
3	Benzo[a]anthracene (BaA)	56-55-3	7	Benzo[k]fluoranthene (BkFA)	207-08-9		
4	Chrysene (CHR)	218-01-9	8	Dibenzo[a,h]anthracene (DBAhA)	53-70-3		

⁻ The list of polycyclic aromatic hydrocarbons is summarized in table of Appendix.



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RESULTS:

BBP/DBP/DEHP CONTENTS IN TOYS AND CHILDCARE ARTICLES (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51)

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and

then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Test Component	Location	Style
A.	Deep red coating	Frame	
	Deep blue coating	Frame	
B.	Soft blue PVC	Chain	
C.	Yellow plastic	Block	
-	Red plastic	Block	
	Matt blue plastic	Panel	
D.	Matt black soft plastic	Crash pad	
	Dull black plastic	End of tube	
	Flat black plastic	Coped cap	
E.	Flat white plastic	Pin inner panel	
= :	Dull translucent plastic	Inner nut	

Test Parameter:	BBP	DBP	DEHP	Sum of three phthalates	
Limit (%):	0.1	0.1	0.1	0.1	
Sample		Re	esult (%)		Conclusion
A.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
B.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
C.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
D.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
E.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS

Detection Limit:

BBP = Butyl benzyl phthalate (0.005%) Results reported in percentage
DBP = Dibutyl phthalate (0.005%) LT = Less than
DEHP = Di(2-ethylhexyl) phthalate (0.005%) ND = None detected



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RESULTS:

DNOP/DINP/DIDP CONTENTS IN TOYS AND CHILDCARE ARTICLES WHICH CAN BE PLACED IN MOUTH BY THE CHILDREN (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52)

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and

then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Test Component	Location	Style
A.	Deep red coating	Frame	
<i>,</i>	Deep blue coating	Frame	
B.	Soft blue PVC	Chain	
C.	Yellow plastic	Block	
	Red plastic	Block	
	Matt blue plastic	Panel	
D.	Matt black soft plastic	Crash pad	
	Dull black plastic	End of tube	
	Flat black plastic	Coped cap	

Test Parameter:	DNOP	DINP	DIDP	Sum of three phthalates	
Limit (%):	0.1	0.1	0.1	0.1	
Sample	Sample Result (%)				
A.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
B.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
C.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS
D.	LT 0.005	LT 0.005	LT 0.005	LT 0.015	PASS

Detection Limit:

DNOP = Di-n-octyl phthalate (0.005%) Results reported in percentage
DINP = Di-iso-nonyl phthalate (0.005%) LT = Less than
DIDP = Di-iso-decyl phthalate (0.005%) ND = None detected



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RESULTS:

BBP/DBP/DEHP/DIBP CONTENTS (European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51 (amended up to EU No. 2018/2005))

Test Method: With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and

then analyzed by Gas Chromatograph Mass Spectrometer

Sample Identity	Test Component	Location	Style
A.	Deep red coating	Frame	
	Deep blue coating	Frame	
B.	Soft blue PVC	Chain	
C.	Yellow plastic	Block	
	Red plastic	Block	
	Matt blue plastic	Panel	
D.	Matt black soft plastic	Crash pad	
	Dull black plastic	End of tube	
	Flat black plastic	Coped cap	
E.	Flat white plastic	Pin inner panel	
	Dull translucent plastic	Inner nut	

Test Parameter:	BBP	DBP	DEHP	DIBP	Sum of four phthalates	
Limit (%):	0.1	0.1	0.1	0.1	0.1	
Sample			Result (%)			Conclusion
A.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
B.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
C.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
D.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS
E.	LT 0.005	LT 0.005	LT 0.005	LT 0.005	LT 0.020	PASS

Detection Limit:

BBP = Butyl benzyl phthalate (0.005%)

DBP = Dibutyl phthalate (0.005%)
DEHP = Di(2-ethylhexyl) phthalate (0.005%)
DIBP = Diisobutyl phthalate (0.005%)

Results reported in percentage

LT = Less than
ND = None detected



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RESULTS:

Candidate List of Substances of Very High Concern for authorization published by European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006 concerning REACH

No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.	Substance name	CAS 110.	EC 110.	1	Limit, %	SVHC
1	Triethyl arsenate*	15606-95-8	427-700-2	ND / see remark x	0.05	Carcinogenic
2	Anthracene	120-12-7	204-371-1	ND	0.05	PBT
3	4,4'-Diaminodiphenyl methane (MDA)	101-77-9	202-974-4	ND	0.05	Carcinogenic
4	Dibutyl phthalate (DBP)	84-74-2	201-557-4	ND	0.05	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health
5	Cobalt dichloride*	7646-79-9	231-589-4	ND	0.05	Carcinogenic
6	Diarsenic pentaoxide*	1303-28-2	215-116-9	ND / see remark x	0.05	Carcinogenic
7	Diarsenic trioxide*	1327-53-3	215-481-4	ND / see remark x	0.05	Carcinogenic
8	Sodium dichromate*	7789-12-0 ⁽¹⁾ , 10588-01-9 ⁽²⁾	234-190-3	ND	0.05	Carcinogenic; Mutagenic; Toxic for reproduction
9	5-tert-butyl-2,4,6-trinitro- m-xylene (musk xylene)	81-15-2	201-329-4	ND	0.05	vPvB
10	Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	204-211-0	ND / XXX ⁷	0.05	Toxic for reproduction; Equivalent level of concern having probable serious effects to environment and human health
11	Hexabromo cyclododecane (HBCDD) and all major diastereoisomers identified: α - HBCDD β - HBCDD γ - HBCDD	3194-55-6 ⁽³⁾ , 25637-99-4 ⁽⁴⁾ 134237-50-6 134237-51-7 134237-52-8	247-148-4, 221-695-9	ND	0.05	PBT
12	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (SCCP)	85535-84-8	287-476-5	ND	0.05	PBT, vPvB



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RESULTS:

<u>Candidate List of Substances of Very High Concern for authorization published by European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006 concerning REACH</u>

No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.		CAS No.	EC No.	1	Limit, %	SVHC
13	Bis(tributyltin)oxide (TBTO)**	56-35-9	200-268-0	ND	0.05	PBT
14	Lead hydrogen arsenate*	7784-40-9	232-064-2	ND / see remark x	0.05	Carcinogenic; Toxic for reproduction
15	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7	ND	0.05	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health
16	2,4-Dinitrotoluene	121-14-2	204-450-0	ND	0.05	Carcinogenic
17	Anthracene oil	90640-80-5	292-602-7	ND	0.1	Carcinogenic, PBT, vPvB
18	Anthracene oil, anthracene paste, distn. Lights	91995-17-4	295-278-5	ND	0.1	Carcinogenic; Mutagenic, PBT, vPvB
19	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9	ND	0.1	Carcinogenic; Mutagenic, PBT, vPvB
20	Anthracene oil, anthracene-low	90640-82-7	292-604-8	ND	0.1	Carcinogenic; Mutagenic, PBT, vPvB
21	Anthracene oil, anthracene paste	90640-81-6	292-603-2	ND	0.1	Carcinogenic; Mutagenic, PBT, vPvB
22	Diisobutyl phthalate	84-69-5	201-553-2	ND	0.05	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health
23	Aluminosilicate, Refractory Ceramic Fibres*a	Index no. 65	0-017-00-8	ND	0.05	Carcinogenic
24	Zirconia Aluminosilicate, Refractory Ceramic Fibres*b	Index no. 65	0-017-00-8	ND	0.05	Carcinogenic
25	Lead chromate*	7758-97-6	231-846-0	ND	0.05	Carcinogenic; Toxic for reproduction



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RESULTS:

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No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.	Substance name	CAS No.	EC No.	1	Limit, %	SVHC
26	Lead chromate molybdate sulfate red (C.I. Pigment Red 104)*	12656-85-8	235-759-9	ND	0.05	Carcinogenic; Toxic for reproduction
27	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	215-693-7	ND	0.05	Carcinogenic; Toxic for reproduction
28	Tris(2-chloroethyl) phosphate	115-96-8	204-118-5	ND	0.05	Toxic for reproduction
29	Coal tar pitch, high temperature	65996-93-2	266-028-2	ND	0.1	Carcinogenic, PBT, vPvB
30	Acrylamide	79-06-1	201-173-7	ND	0.05	Carcinogenic; Mutagenic
31	Trichloroethylene	79-01-6	201-167-4	ND	0.05	Carcinogenic
32	Boric acid*	10043-35-3, 11113-50-1	233-139-2 / 234-343-4	ND	0.05	Toxic for reproduction
33	Disodium tetraborate, anhydrous*	1330-43-4 ⁽⁵⁾ , 12179-04-3 ⁽⁶⁾ , 1303-96-4 ⁽⁷⁾	215-540-4	ND	0.05	Toxic for reproduction
34	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	235-541-3	ND	0.05	Toxic for reproduction
35	Sodium chromate*	7775-11-3	231-889-5	ND	0.05	Carcinogenic; Mutagenic; Toxic for reproduction
36	Potassium chromate*	7789-00-6	232-140-5	ND	0.05	Carcinogenic; Mutagenic
37	Ammonium dichromate*	7789-09-5	232-143-1	ND	0.05	Carcinogenic; Mutagenic; Toxic for reproduction
38	Potassium dichromate*	7778-50-9	231-906-6	ND	0.05	Carcinogenic; Mutagenic; Toxic for reproduction
39	Cobalt(II) sulphate*	10124-43-3	233-334-2	ND	0.05	Carcinogenic; Toxic for reproduction
40	Cobalt(II) dinitrate*	10141-05-6	233-402-1	ND	0.05	Carcinogenic; Toxic for reproduction
41	Cobalt(II) carbonate*	513-79-1	208-169-4	ND	0.05	Carcinogenic; Toxic for reproduction



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RESULTS:

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No.	Substance name	CAS No.	EC No.	Result, %	Detection Limit, %	Basis for identification as a
				1	-,	SVHC
42	Cobalt(II) diacetate*	71-48-7	200-755-8	ND	0.05	Carcinogenic; Toxic for reproduction
43	2-Methoxyethanol	109-86-4	203-713-7	ND	0.05	Toxic for reproduction
44	2-Ethoxyethanol	110-80-5	203-804-1	ND	0.05	Toxic for reproduction
45	Chromium trioxide*	1333-82-0	215-607-8	ND	0.05	Carcinogenic; Mutagenic
46	Acid generated from chromium trioxide and their oligomers: Chromic acid* Dichromic acid* Oligomers of chromic acid and dichromic acid*	7738-94-5 13530-68-2	231-801-5 236-881-5	ND	0.05	Carcinogenic
47	2-Ethoxyethyl acetate	111-15-9	203-839-2	ND	0.05	Toxic for reproduction
48	Strontium Chromate*	7789-06-2	232-142-6	ND	0.05	Carcinogenic
49	1,2-benzenedicarboxylic acid, di-C7-11 branched alkyl ester and linear alkyl ester	68515-42-4	271-084-6	ND	0.05	Toxic for reproduction
50	Hydrazine	302-01-2 7803-57-8	206-114-9	ND	0.05	Carcinogenic
51	1-Methyl-2-pyrrolidone	872-50-4	212-828-1	ND	0.05	Toxic for reproduction
52	1,2,3-trichloropropane	96-18-4	202-486-1	ND	0.05	Toxic for reproduction
53	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl ester, C7-rich (DIHP)	71888-89-6	276-158-1	ND	0.05	Toxic for reproduction
54	Dichromium tris(chromate)*	24613-89-6	246-356-2	ND	0.05	Carcinogenic
55	Potassium hydroxyoctaoxodizincated i-chromate*	11103-86-9	234-329-8	ND	0.05	Carcinogenic



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RESULTS:

<u>Candidate List of Substances of Very High Concern for authorization published by European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006 concerning REACH</u>

No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110	Substance name	C115 1101	20110	1	Limit, %	SVHC
56	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	ND	0.05	Carcinogenic
57	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	500-036-1	ND	0.05	Carcinogenic
58	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6	ND	0.05	Toxic for reproduction
59	2-Methoxyaniline; o-Anisidine	90-04-0	201-963-1	ND	0.05	Carcinogenic
60	4-(1,1,3,3- tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	205-426-2	ND	0.05	Equivalent level of concern
61	1,2-Dichloroethane	107-06-2	203-458-1	ND	0.05	Carcinogenic
62	Bis(2-methoxyethyl) ether	111-96-6	203-924-4	ND	0.05	Toxic for reproduction
63	Arsenic acid*	7778-39-4	231-901-9	ND	0.1	Carcinogenic
64	Calcium arsenate*	7778-44-1	231-904-5	ND	0.05	Carcinogenic
65	Trilead diarsenate*	3687-31-8	222-979-5	ND	0.05	Carcinogenic; Toxic for reproduction
66	N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4	ND	0.05	Toxic for reproduction
67	2,2'-dichloro-4,4'- methylenedianiline (MOCA)	101-14-4	202-918-9	ND	0.05	Carcinogenic
68	Phenolphthalein	77-09-8	201-004-7	ND	0.05	Carcinogenic
69	Lead azide, Lead diazide*	13424-46-9	236-542-1	ND	0.05	Toxic for reproduction
70	Lead styphnate*	15245-44-0	239-290-0	ND	0.05	Toxic for reproduction
71	Lead dipicrate*	6477-64-1	229-335-2	ND	0.05	Toxic for reproduction
72	1,2-bis(2- methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	203-977-3	ND	0.05	Toxic for reproduction
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9	ND	0.05	Toxic for reproduction
74	Diboron trioxide*	1303-86-2	215-125-8	ND	0.05	Toxic for reproduction



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RESULTS:

Candidate List of Substances of Very High Concern for authorization published by European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006 concerning REACH

No	Cubatanaa nama	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
No.	Substance name	CAS No.	EC No.	1	Limit, %	SVHC
75	Formamide	75-12-7	200-842-0	ND	0.05	Toxic for reproduction
76	Lead(II) bis(methanesulfonate)*	17570-76-2	401-750-5	ND	0.05	Toxic for reproduction
77	TGIC (1,3,5- tris(oxiranylmethyl)-1,3,5- triazine-2,4,6(1H,3H,5H)- trione)§	2451-62-9	219-514-3	ND	0.05	Mutagenic
78	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione) [§]	59653-74-6	423-400-0	ND	0.05	Mutagenic
79	4,4'- bis(dimethylamino)benzop henone (Michler's ketone)	90-94-8	202-027-5	ND	0.05	Carcinogenic
80	N,N,N',N'-tetramethyl- 4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2	ND	0.05	Carcinogenic
81	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohex a-2,5-dien-1-ylidene]dimethylammoniu m chloride (C.I. Basic Violet 3)	548-62-9	208-953-6	ND	0.05	Carcinogenic
82	[4-[[4-anilino-1- naphthyl]][4- (dimethylamino) phenyl]methylene]cyclohe xa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	219-943-6	ND	0.05	Carcinogenic



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RESULTS:

Candidate List of Substances of Very High Concern for authorization published by European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006 concerning REACH

No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.	Substance name	CAS NO.	EC 110.	1	Limit, %	SVHC
83	α,α-Bis[4- (dimethylamino)phenyl]-4 (phenylamino)naphthalene -1-methanol (C.I. Solvent Blue 4)	6786-83-0	229-851-8	ND	0.05	Carcinogenic
84	4,4'-bis(dimethylamino)- 4"-(methylamino)trityl alcohol	561-41-1	209-218-2	ND	0.05	Carcinogenic
85	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	214-604-9	ND	0.05	Persistent, bioaccumulative and toxic; very persistent and very bioaccumulative
86	N,N-dimethylformamide; dimethyl formamide	68-12-2	200-679-5	ND	0.05	Toxic for reproduction
87	Methoxy acetic acid	625-45-6	210-894-6	ND	0.05	Toxic for reproduction; equivalent level of concern
88	Dibutyltin dichloride (DBT) th	683-18-1	211-670-0	ND	0.05	Toxic for reproduction
89	1,2-Diethoxyethane	629-14-1	211-076-1	ND	0.05	Toxic for reproduction
90	Hexahydro-2-benzofuran- 1,3-dione (HHPA), cis- cyclohexane-1,2- dicarboxylic anhydride, trans-cyclohexane-1,2- dicarboxylic anhydride	85-42-7, 13149-00-3, 14166-21-3	201-604-9, 236-086-3, 238-009-9	ND	0.05	Equivalent level of concern
91	Hexahydromethylphathalic anhydride, Hexahydro-4- methylphathalic anhydride, Hexahydro-1- methylphathalic anhydride, Hexahydro-3- methylphathalic anhydride	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260-566-1	ND	0.05	Equivalent level of concern



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RESULTS:

Candidate List of Substances of Very High Concern for authorization published by European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006 concerning REACH

No.	Substance name	CAS No.	EC No.	Result, %	Detection Limit, %	Basis for identification as a SVHC
92	4-Nonylphenol, branched and linear - substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof	-	-	ND	0.05	Equivalent level of concern
93	Heptacosafluorotetradecano ic acid	376-06-7	206-803-4	ND	0.05	Very persistent and very bioaccumulative
94	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear ⁺	84777-06-0	284-032-2	ND	0.05	Toxic for reproduction
95	Henicosafluoroundecanoic acid	2058-94-8	218-165-4	ND	0.05	Very persistent and very bioaccumulative
96	N-pentyl-isopentylphtalate (iPnPP) +	776297-69-9	-	ND	0.05	Toxic for reproduction
97	Pentacosafluorotridecanoic acid	72629-94-8	276-745-2	ND	0.05	Very persistent and very bioaccumulative
98	4-(1,1,3,3- tetramethylbutyl)phenol, ethoxylated - covering well- defined substances and UVCB substances, polymers and homologues	-	-	ND	0.05	Equivalent level of concern
99	Tricosafluorododecanoic acid	307-55-1	206-203-2	ND	0.05	Very persistent and very bioaccumulative
100	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	ND	0.05	Toxic for reproduction
101	Lead tetroxide (orange lead)*	1314-41-6	215-235-6	ND	0.05	Toxic for reproduction
102	Diethyl sulphate	64-67-5	200-589-6	ND	0.05	Carcinogenic; Mutagenic
103	Dinoseb	88-85-7	201-861-7	ND	0.05	Toxic for reproduction



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RESULTS:

<u>Candidate List of Substances of Very High Concern for authorization published by European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006 concerning REACH</u>

No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.		C/15 110.	EC 140.	1	Limit, %	SVHC
104	Lead Titanium Zirconium Oxide*	12626-81-2	235-727-4	ND	0.05	Toxic for reproduction
105	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	ND	0.05	Toxic for reproduction
106	Furan	110-00-9	203-727-3	ND	0.05	Carcinogenic
107	N-methylacetamide	79-16-3	201-182-6	ND	0.05	Toxic for reproduction
108	o-Toluidine; 2-Aminotoluene	95-53-4	202-429-0	ND	0.05	Carcinogenic
109	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7	ND	0.05	Toxic for reproduction
110	4,4'-oxydianiline and its salts	101-80-4	202-977-0	ND	0.05	Carcinogenic; Mutagenic
111	[Phthalato(2-)]dioxotrilead (Dibasic lead phthalate)*	69011-06-9	273-688-5	ND	0.05	Toxic for reproduction
112	Lead titanium trioxide*	12060-00-3	235-038-9	ND	0.05	Toxic for reproduction
113	Lead oxide sulphate*	12036-76-9	234-853-7	ND	0.05	Toxic for reproduction
114	Lead dinitrate*	10099-74-8	233-245-9	ND	0.05	Toxic for reproduction
115	4-Aminoazobenzene;4-Phenylazoaniline	60-09-3	200-453-6	ND	0.05	Carcinogenic
116	Lead cyanamidate*	20837-86-9	244-073-9	ND	0.05	Toxic for reproduction
117	Tetralead trioxide sulphate*	12202-17-4	235-380-9	ND	0.05	Toxic for reproduction
118	4-methyl-m- phenylenediamine (2,4- toluene-diamine)	95-80-7	202-453-1	ND	0.05	Carcinogenic
119	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	ND	0.05	Toxic for reproduction
120	Trilead bis(carbonate)dihydroxide (basic lead carbonate)*	1319-46-6	215-290-6	ND	0.05	Toxic for reproduction
121	Dimethyl sulphate	77-78-1	201-058-1	ND	0.05	Carcinogenic
122	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	ND	0.05	Toxic for reproduction
123	Silicic acid, barium salt, lead-doped*	68784-75-8	272-271-5	ND	0.05	Toxic for reproduction
124	Biphenyl-4-ylamine	92-67-1	202-177-1	ND	0.05	Carcinogenic
125	Lead oxide (lead monoxide)*	1317-36-8	215-267-0	ND	0.05	Toxic for reproduction



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No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.	Substance name	CAS No.	EC 110.	1	Limit, %	SVHC
126	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	ND	0.05	Toxic for reproduction
127	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	200-879-2	ND	0.05	Carcinogenic; Mutagenic
128	Silicic acid, lead salt*	11120-22-2	234-363-3	ND	0.05	Toxic for reproduction
129	Trilead dioxide phosphonate*	12141-20-7	235-252-2	ND	0.05	Toxic for reproduction
130	o-aminoazotoluene	97-56-3	202-591-2	ND	0.05	Carcinogenic
131	1-bromopropane	106-94-5	203-445-0	ND	0.05	Toxic for reproduction
132	6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1	ND	0.05	Carcinogenic
133	4,4'-methylenedi-o- toluidine	838-88-0	212-658-8	ND	0.05	Carcinogenic
134	Tetraethyllead*	78-00-2	201-075-4	ND	0.05	Toxic for reproduction
135	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	ND	0.05	Toxic for reproduction
136	Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7	ND	0.05	Toxic for reproduction
137	Diisopentylphthalate ⁺	605-50-5	210-088-4	ND	0.05	Toxic for reproduction
138	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8	ND	0.05	Equivalent level of concern
139	Cadmium*	7440-43-9	231-152-8	ND	0.05	Carcinogenic; Equivalent level of concern
140	Cadmium oxide*	1306-19-0	215-146-2	ND	0.05	Carcinogenic; Equivalent level of concern
141	Dipentyl phthalate (DPP) ⁺	131-18-0	205-017-9	ND	0.05	Toxic for reproduction



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No.	Substance name	ce name CAS No. EC No. Result, %		Result, %	Detection	Basis for identification as a
110.	Substance name	CAS No.	EC 140.	1	Limit, %	SVHC
142	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	-	ND	0.05	Equivalent level of concern
143	Ammonium pentadecafluorooctanoate (APFO) [≠]	3825-26-1	223-320-4	ND	0.05	Toxic for reproduction; PBT
144	Pentadecafluorooctanoic acid (PFOA) [≠]	335-67-1	206-397-9	ND	0.05	Toxic for reproduction; PBT
145	Cadmium sulphide*	1306-23-6	215-147-8	ND	0.05	Carcinogenic; Equivalent level of concern
146	Dihexyl phthalate	84-75-3	201-559-5	ND	0.05	Toxic for reproduction
147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	209-358-4	ND	0.05	Carcinogenic
148	Disodium 4-amino-3-[[4'- [(2,4- diaminophenyl)azo][1,1'- biphenyl]-4-yl]azo] -5- hydroxy-6- (phenylazo)naphthalene- 2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	217-710-3	ND	0.05	Carcinogenic



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No.	Substance name	CAS No.	EC No.	Result, %	Detection Limit, %	Basis for identification as a SVHC
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	202-506-9	ND	0.05	Toxic for reproduction
150	Lead di(acetate)*	301-04-2	206-104-4	ND	0.05	Toxic for reproduction
151	Trixylyl phosphate	25155-23-1	246-677-8	ND	0.05	Toxic for reproduction
152	Cadmium chloride*	10108-64-2	233-296-7	ND	0.05	Carcinogenic; Mutagenic; Toxic for Reproduction; Equivalent level of concern having probable serious effects to human health
153	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear**	68515-50-4	271-093-5	ND	0.05	Toxic for reproduction
154	Sodium peroxometaborate*	7632-04-4	231-556-4	ND	0.05	Toxic for reproduction
155	Sodium perborate; perboric acid, sodium salt*	-	239-172-9; 234-390-0	ND	0.05	Toxic for reproduction
156	Cadmium fluoride*	7790-79-6	232-222-0	ND	0.05	Carcinogenic; Mutagenic; Toxic for Reproduction; Equivalent level of concern having probable serious effects to human health
157	Cadmium sulphate*	10124-36-4; 31119-53-6	233-331-6	ND	0.05	Carcinogenic; Mutagenic; Toxic for Reproduction; Equivalent level of concern having probable serious effects to human health



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RESULTS:

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No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.	bubstunee nume	C/15 110.	Le ru.	1	Limit, %	SVHC
158	2-benzotriazol-2-yl-4,6-ditert-butylphenol (UV-320)	3846-71-7	223-346-6	ND	0.05	PBT; vPvB
159	2-(2H-benzotriazol-2-yl)- 4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8	ND	0.05	PBT; vPvB
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) th	15571-58-1	239-622-4	ND	0.05	Toxic for Reproduction
161	Reaction mass of 2- ethylhexyl 10-ethyl-4,4- dioctyl-7-oxo-8-oxa-3,5- dithia-4- stannatetradecanoate and 2-ethylhexyl 10-ethyl-4- [[2-[(2-ethylhexyl)oxy]-2- oxoethyl]thio]-4-octyl-7- oxo-8-oxa-3,5-dithia-4- stannatetradecanoate (reaction mass of DOTE and MOTE) th	-	-	ND	0.05	Toxic for Reproduction
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5; 68648-93-1	271-094-0; 272-013-1	ND	0.05	Toxic for reproduction



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No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.		01101	20110	1	Limit, %	SVHC
163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual isomers of [1] and [2] or any combination thereof]	-	-	ND	0.05	vPvB
164	1,3-propanesultone	1120-71-4	214-317-9	ND	0.05	Carcinogenic
165	2,4-di-tert-butyl-6-(5- chlorobenzotriazol-2- yl)phenol (UV-327)	3864-99-1	223-383-8	ND	0.05	vPvB
166	2-(2H-benzotriazol-2-yl)- 4-(tert-butyl)-6-(sec- butyl)phenol (UV-350)	36437-37-3	253-037-1	ND	0.05	vPvB
167	Nitrobenzene	98-95-3	202-716-0	ND	0.05	Toxic for reproduction
168	Perfluorononan-1-oic acid acid and its sodium and ammonium salts	375-95-1; 21049-39-8; 4149-60-4	206-801-3	ND	0.05	Toxic for reproduction; PBT
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5	ND	0.05	Carcinogenic; Mutagenic; Toxic for Reproduction; PBT; vPvB
170	4,4'- isopropylidenediphenol (bisphenol A; BPA)	80-05-7	201-245-8	ND	0.05	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health & environment



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No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
				1	Limit, %	SVHC
171	4-Heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] (4-Hpbl)	-	-	ND	0.05	Equivalent level of concern having probable serious effects to the environment
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3830-45-3, 335-76-2, 3108-42-7	-, 206-400-3, 221-470-5	ND	0.05	Toxic for reproduction; PBT
173	p-(1,1- dimethylpropyl)phenol (PTAP)	80-46-6	201-280-9	ND	0.05	Equivalent level of concern having probable serious effects to the environment
174	Perfluorohexane-1- sulphonic acid and its salts (PFHxS)	-	-	ND	0.05	vPvB
175	1,6,7,8,9,14,15,16,17,17,1 8,18- Dodecachloropentacyclo [12.2.1.16,9.02,13.05,10] octadeca-7,15-diene ("Dechlorane Plus"TM) [covering any of its individual anti- and syn- isomers or any combination thereof]	-	-	ND	0.05	vPvB
176	Benz[a]anthracene	56-55-3	200-280-6	ND	0.05	Carcinogenic; PBT; vPvB



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No.	Substance name	CAS No.	EC No.	Result, %	Detection Limit, %	Basis for identification as a SVHC
177	Cadmium nitrate	10325-94-7	233-710-6	ND	0.05	Carcinogenic; Mutagenic; Equivalent level of concern having probable serious effects to human health
178	Cadmium carbonate	513-78-0	208-168-9	ND	0.05	Carcinogenic; Mutagenic; Equivalent level of concern having probable serious effects to human health
179	Cadmium hydroxide	21041-95-2	244-168-5	ND	0.05	Carcinogenic; Mutagenic; Equivalent level of concern having probable serious effects to human health
180	Chrysene	218-01-9	205-923-4	ND	0.05	Carcinogenic; PBT; vPvB
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	-	-	ND	0.05	Equivalent level of concern having probable serious effects to the environment
182	Octamethylcyclotetrasilox ane (D4)	556-67-2	209-136-7	ND	0.05	PBT; vPvB
183	Decamethylcyclopentasilo xane (D5)	541-02-6	208-764-9	ND	0.05	PBT; vPvB



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No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110.	Substance name	CAS No.	EC 140.	1	Limit, %	SVHC
184	Dodecamethylcyclohexasil oxane (D6)	540-97-6	208-762-8	ND	0.05	PBT; vPvB
185	Lead	7439-92-1	231-100-4	ND	0.05	Toxic for reproduction
186	Disodium octaborate	12008-41-2	234-541-0	ND	0.05	Toxic for reproduction
187	Benzo[ghi]perylene	191-24-2	205-883-8	ND	0.05	PBT; vPvB
188	Terphenyl hydrogenated	61788-32-7	262-967-7	ND	0.05	vPvB
189	Ethylenediamine (EDA)	107-15-3	203-468-6	ND	0.05	Equivalent level of concern having probable serious effects to human health
190	Benzene-1,2,4- tricarboxylic acid 1,2 anhydride (TMA)	552-30-7	209-008-0	ND	0.05	Equivalent level of concern having probable serious effects to human health
191	Dicyclohexyl phthalate (DCHP)	84-61-7	201-545-9	ND	0.05	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health
192	2,2-bis(4'-hydroxyphenyl)- 4-methylpentane	6807-17-6	401-720-1	ND	0.05	Toxic for reproduction
193	Benzo[k]fluoranthene	207-08-9	205-916-6	ND	0.05	Carcinogenic; PBT; vPvB
194	Fluoranthene	206-44-0	205-912-4	ND	0.05	PBT; vPvB



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No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a SVHC
110.		CAS 110.	EC 110.	1	Limit, %	
195	Phenanthrene	85-01-8	201-581-5	ND	0.05	vPvB
196	Pyrene	129-00-0	204-927-3	ND	0.05	PBT; vPvB
197	1,7,7-trimethyl-3- (phenylmethylene)bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor; 3-BC)	15087-24-8	239-139-9	ND	0.05	Equivalent level of concern having probable serious effects to the environment
198	2-methoxyethyl acetate	110-49-6	203-772-9	ND	0.05	Toxic for reproduction
199	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4- nonylphenol, branched and linear (4-NP)	-	-	ND	0.05	Equivalent level of concern having probable serious effects to the environment
200	2,3,3,3-tetrafluoro-2- (heptafluoropropoxy)propi onic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	-	ND	0.05	Equivalent level of concern having probable serious effects on the environment & human health
201	4-tert-butylphenol (PTBP)	98-54-4	202-679-0	ND	0.05	Equivalent level of concern having probable serious effects to the environment
202	2-benzyl-2- dimethylamino-4'- morpholinobutyrophenone	119313-12-1	404-360-3	ND	0.05	Toxic for reproduction



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Test Item 1: TEETER TOTTER ACE FLYER PRIMARY

No.	Substance name	CAS No.	EC No.	Result, %	Detection	Basis for identification as a
110	Substance name	0115 110	20110.	1	Limit, %	SVHC
203	2-methyl-1-(4- methylthiophenyl)-2- morpholinopropan-1-one	71868-10-5	400-600-6	ND	0.05	Toxic for reproduction
204	Diisohexyl phthalate	71850-09-4	276-090-2	ND	0.05	Toxic for reproduction
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	-	ND	0.05	Equivalent level of concern having probable serious effects on the environment and human health

⁽¹⁾ CAS no. 7789-12-0 refers to sodium dichromate dihydrate

Method: Analysis is based on GC, LC, IC, ICP, with various detection techniques and UV.

⁽²⁾ CAS no. 10588-01-9 refers to anhydrous sodium dichromate

⁽³⁾ CAS no. 3194-55-6 refers to a specific HBCDD - 1,2,5,6,9,10-hexabromocyclododecane

⁽⁴⁾ CAS no. 25637-99-4 refers to unspecific HBCDD isomer composition

⁽⁵⁾ CAS no. 1330-43-4 refers to disodium tetraborate, anhydrous

⁽⁶⁾ CAS no. 12179-04-3 refers to sodium tetraborate, pentahydrate

⁽⁷⁾ CAS no. 1303-96-4 refers to sodium tetraborate, decahydrate



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RESULTS:

Remark:

- 1. PBT = Persistent, bio accumulative and toxic as defined in Regulation (EC) No 1907/2006
- 2. vPvB = Very persistent and very bio accumulative as defined in Regulation (EC) No 1907/2006
- 3. ND = Not Detected
- 4. If the article contains a material type whose weight is <0.1% of the total article weight, this material type is ignored for testing.
- *Result is based on the heavy metal or inorganic element concentration. Due to the limit of the analytical technology available, any further investigation is not feasible. The client is strongly advised to review the chemical formulation to ascertain.
- 6. **Result is identified by tributyltin (TBT). Due to the limit of the analytical technology available, any further investigation is not feasible. The client is strongly advised to review the chemical formulation to ascertain.
- 7. ${}^{\$}TGIC$ (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione) and β -TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione) are reported as a mixture.
- 8. aRefer to Aluminosilicate, Refractory Ceramic Fibres fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μm) c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight.
- bRefer to Zirconia Aluminosilicate, Refractory Ceramic Fibres fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm). c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight.
- 10. ⁺[1,2-Benzenedicarboxylic acid, dipentylester, branched and linear] is a mixture of phthalates contains DPP, DIPP and N-pentyl-isopentylphtalate.
- 11. [‡]PFOA and APFO are reported together. The result is based on PFOA concentration. Due to the limit of the analytical technology available, any further investigation is not feasible. The client is strongly advised to review the chemical formulation to ascertain.
- 12. **[1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear] is a mixture of phthalates contains dihexyl phthalate.
- 13. ^dResult is based on the tin metal concentration, and further confirmation for checking DBT, DOTE & MOTE concentration.



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RESULTS:

Note:

- 1. The limit of 0.1% (w/w) applies to an article. The results were calculated assuming as the submitted sample was an article. However, the results may not be applicable if the intended use of the sample is a substance or mixture. According to REACH, definition of an article, substance and mixture are:
 - i. Article An object during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition
 - ii. Substance A chemical element and its compound in the natural state or obtained by any manufacturing process
- iii. Mixture (Previously known as "Preparation") A mixture or solution composed of two or more substances
- 2. In accordance of Article 7 of Regulation (EC) No. 1907/2006 (REACH regulation) Registration and notification of substances in articles, any producer or importer of articles shall notify ECHA, if a substance meets in criteria in Article 57 and is identified in accordance with Article 59(1), if both (1) the substance is present in those articles in quantities totalling over 1 tonne per producer or importer per year & (2) the substance is present in those articles above a concentration of 0.1% weight by weight (w/w) are met. The information to be notified shall include (a) identity and contact details of the producer or importer, (b) the registration numbers, (c) the identity of the substance and (d) the classification of the substance, (e) a brief description of the use of the substance and (f) the tonnage range of the substance.
- 3. In accordance of Article 33 of Regulation (EC) No. 1907/2006 (REACH regulation) Duty to communicate information on substances in articles, any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance. On request by a consumer the relevant information shall be provided by any supplier of an article free of charge, within 45 days of receipt of the request.



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RESULTS:



END OF REPORT