

TEST REPORT

APPLICANT

: JinJiang Nobel Star Toys Co., Ltd.

ADDRESS

: No.3 of Quan Yuan Road, WuLi District, JinJiang Economic Development Zone, JinJiang City, Fujian, China

SAMPLE DESCRIPTION: Toy car (tractor+digger),
Toy car (tractor+digger+trailer),
TOY CAR (TRADTOR + DUMPER),
TOY CAR (TRADTOR + DUMPER + TRAILER),
TOY CAR (TRACTOR + TRAILER),
TOY CAR (TRACTOR),
TOY CAR (TRACTOR + LOADER),
TOY CAR (TRACTOR + LOADER + TRAILER),
Toy car (tractor+backhoe),
Toy car (tractor+backhoe+trailer),
Toy car (tractor+loader + backhoe),
Toy car (tractor+loader + backhoe+trailer)**ITEM NO.**: 5001、
5002、
5003、
5005、
3001 RED、 3001 GREEN、 3001 YELLOW、
3002 RED、 3002 GREEN、 3002 YELLOW、
3003 RED、 3003 GREEN、 3003 YELLOW、
3005 RED、 3005 GREEN、 3005 YELLOW、
3006 RED、 3006 GREEN、 3006 YELLOW、
3007 RED、 3007 GREEN、 3007 YELLOW、
3008 RED、 3008 GREEN、 3008 YELLOW、
3009 RED、 3009 GREEN、 3009 YELLOW**AGE REQUESTED ON APPLICATION FORM**

: 3+

LABELED AGE GRADE

: Not suitable for children under 3 years

AGE GRADE APPLIED IN TESTING

: Over 3 Years

LAB RECOMMENDED AGE GRADE

: Over 3 Years

SAMPLE RECEIVED DATE

: 13-Oct-2023

FURTHER INFORMATION DATE

: 02-Nov-2023

TURN AROUND TIME

: 13-Oct-2023 to 08-Nov-2023



The following test item(s) was/were performed on submitted sample(s) and/or component(s) confirmed by applicant

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Physical and Mechanical Hazards	EN 71-1:2014+A1:2018	Pass
Labeling Requirement	Directive 2009/48/EC	Pass
Flammability of Toys	EN 71-2:2020	Pass
Migration of Certain Elements	EN 71-3:2019+A1:2021	Pass
Total Cadmium Content	REACH Annex XVII, Entry 23	Pass
Phthalates Content	REACH Annex XVII, Entry 51 & 52	Pass
Polycyclic Aromatic Hydrocarbons (PAHs)	REACH Annex XVII, Entry 50	Pass

Note: As per client's request, all the test results are quoted from test report EFSH23100450-CG-01.

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
Eurofins Product Testing Service (Shanghai) Co., Ltd




Joyce Liu
Operation Director

Samples are obtained by express delivery, Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to info.sh@eurofins.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint@eurofins.com and referring to this report number.

SAMPLE PHOTO(S)

	
A-5001	B-5002
	
C-5003	D-5005
	
E-3001 RED	F-3001 GREEN

EFSH23100450-CG-05

TO BE CONTINUED

SAMPLE PHOTO(S)


G-3001 YELLOW

H-3002 RED

I-3002 GREEN

J-3002 YELLOW

K-3003 RED

L-3003 GREEN

EFSH23100450-CG-05

TO BE CONTINUED

SAMPLE PHOTO(S)



M-3003 YELLOW



N-3005 RED



O-3005 GREEN



P-3005 YELLOW



Q-3006 RED



R-3006 GREEN

EFSH23100450-CG-05

TO BE CONTINUED

SAMPLE PHOTO(S)



S-3006 YELLOW



T-3007 RED



U-3007 GREEN



V-3007 YELLOW



W-3008 RED



X-3008 GREEN

EFSH23100450-CG-05

TO BE CONTINUED

SAMPLE PHOTO(S)


Y-3008 YELLOW

Z-3009 RED

AA-3009 GREEN

AB-3009 YELLOW

EFSH23100450-CG-05

TO BE CONTINUED

COMPONENT LIST

Component No.	Component	Sample No.
1	White paper with multi-color coating (instruction)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
2	White paper sticker with black/red coating (car seat)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
3	Black coating on metal (black long rod)	AA,AB,K,L,M,N,O,P,W,X,Y,Z
4	White paper sticker with transparent plastic film and underlying multi-color coating	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
5	Red plastic (car shovel)	L,O,W,Z
6	Red plastic (large body)	F,J,L,O,R,T,V,W
7	Black plastic (steering wheel)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
8	White plastic (wheels)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
9	Deep red plastic (steering wheel)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
10	Black plastic (large body)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
11	Black plastic (wheels)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
12	Black plastic (foot pedal)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
13	Black plastic (car seat)	A,AA,AB,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z
14	Yellow plastic (body)	A,AA,AB,B,C,D,E,H,K,P,Q,R,S,T,U,V,W,X,Y,Z
15	Red plastic (small shovel)	AB,B,D,E,P,V,W
16	Black plastic (railing)	AA,AB,B,D,E,F,N,O,P,T,U,V,Z
17	Yellow plastic (small shovel)	AA,F,G,J,L,M,N,O,R,T,U,X,Y,Z
18	Green plastic (body)	AA,G,I,M,N,S,U,X
19	Green plastic (car shovel)	AA,M,N,X
20	Yellow plastic (shovel)	AB,K,P,Y

TO BE CONTINUED

TEST RESULT

Physical and Mechanical Hazards

Test Request: As specified in European Standard on Safety of Toys EN 71-1:2014+A1:2018

Section	Description	Result
4	General requirements	
4.1	Material cleanliness (by visual assessment)	P
4.2	Assembly	P
4.3	Flexible plastic sheeting	N/A
4.4	Toy Bags	N/A
4.5	Glass	N/A
4.6	Expanding Materials	N/A
4.7	Edges	P
4.8	Points and Metallic Wires	P
4.9	Protruding parts	P
4.10	Parts moving against each other	
4.10.1	Folding and sliding mechanisms	N/A
4.10.2	Driving mechanisms.	N/A
4.10.3	Hinges	N/A
4.10.4	Springs	N/A
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	N/A
4.12	Balloons	N/A
4.13	Cords of toy kites and other flying toys.	N/A
4.14	Enclosures	
4.14.1	Toys which a child can enter	N/A
4.14.2	Masks and helmets	N/A
4.15	Toys intended to bear the mass of a child	
4.15.1	Toys propelled by the child or by other means	P
4.15.2	Toy bicycles	N/A
4.15.3	Rocking horses and similar toys	N/A
4.15.4	Toys not propelled by a child	N/A
4.15.5	Toys scooters	N/A
4.16	Heavy immobile toys	N/A
4.17	Projectiles	
4.17.1	General	N/A
4.17.2	All projectiles	N/A
4.17.3	Projectile toy with stored energy	N/A
4.17.4	Certain projectile toys without stored energy	N/A
4.18	Aquatic toys and inflatable toys	N/A
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	N/A
4.20	Acoustics	
4.20.2.1	General	P
4.20.2.2	Close-to-the-ear toys	N/A
4.20.2.3	Table-top or floor toys	N/A
4.20.2.4	Hand-held toys	N/A
4.20.2.5	Toys using headphones or earphones	N/A
4.20.2.6	Rattles	N/A
4.20.2.7	Squeeze toys	P
4.20.2.8	Pull-along or push toys	N/A
4.20.2.9	Percussion toys	N/A

TO BE CONTINUED

TEST RESULT

Section	Description	Result
4.20.2.10	Wind toys	N/A
4.20.2.11	Cap-firing toys	N/A
4.20.2.12	Voice toys	N/A
4.21	Toys containing a non-electrical heat source	N/A
4.22	Small balls	N/A
4.23	Magnets	N/A
4.24	Yo-yo balls	N/A
4.25	Toys attached to food	N/A
4.26	Toy disguise costumes	N/A
4.27	Flying toys	
4.27.1	General	N/A
4.27.2	Rotors and propellers on flying toys	N/A
4.27.3	Rotors and propellers on remote controlled flying toys	N/A
5	Toys intended for children under 36 months	
5.1	General requirements	N/A
5.2	Soft-filled toys and soft-filled parts of a toy	N/A
5.3	Plastic sheeting	N/A
5.4	Cords, chains and electrical cables in toys	N/A
5.5	Liquid-filled toys	N/A
5.6	Speed limitation of electrically-driven ride-on toys	N/A
5.7	Glass and porcelain	N/A
5.8	Shape and size of certain toys	N/A
5.9	Toys comprising monofilament fibres	N/A
5.10	Small balls	N/A
5.11	Play figures	N/A
5.12	Hemispheric-shaped toys	N/A
5.13	Suction cups	N/A
5.14	Straps intended to be worn fully or partially around the neck	N/A
5.15	Sledges with cords for pulling	N/A
6	Packaging	P
7	Warnings, markings and instructions for use	
7.1	General	P
7.2	Toys not intended for children under 36 months	P
7.3	Latex Balloons	N/A
7.4	Aquatic toys	N/A
7.5	Functional Toys	N/A
7.6	Hazardous sharp functional edges and points	N/A
7.7	Projectiles toys	N/A
7.8	Imitation protective masks and helmets	N/A
7.9	Toy kites	N/A
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys	P
7.11	Toys intended to be strung across a cradle, cot, or perambulator	N/A
7.12	Liquid-filled teethingers	N/A
7.13	Percussion caps specifically designed for use in toys	N/A
7.14	Acoustics	N/A
7.15	Toys bicycles	N/A
7.16	Toys intended to bear the mass of a child	N/A
7.17	Toys comprising monofilament fibres	N/A
7.18	Toy scooters	N/A

TO BE CONTINUED

TEST RESULT

Section	Description	Result
7.19	Rocking horses and similar toys	N/A
7.20	Magnetic/electrical experimental sets	N/A
7.21	Toy with electrical cables exceeding 300mm in length	N/A
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	N/A
7.23	Toys intended to be attached to a cradle, cot or perambulator	N/A
7.24	Sledges with cords for pulling	N/A
7.25	Flying toys	
7.25.1	Flying toys	N/A
7.25.2	Remote controlled flying toys	N/A
7.26	Improvised projectiles	N/A

Remark:

P - Pass, F - Fail, N/A - Not Applicable, N/C - Not Conduct as per client's request

TO BE CONTINUED

TEST RESULT

Labeling Requirement

Test Request: Labeling requirement including Washing/Cleaning instruction, CE mark, importer / manufacturer name and address, product identification as specified in Directive 2009/48/EC
- Safety of toys

Labeling Content	Observation Result	Location	Conclusion
Washing/Cleaning Instruction	Not Applicable	-	-
CE Mark	Present, Correct form, CE marking (height >5mm)	Packaging Product	Pass
Importer's Name & Address	Present	Packaging	Pass
Manufacturer's Name & Address	Present	Packaging Product	Pass
Product ID	Present	Packaging	Pass

Flammability of Toys

Test Request: As Specified in European Standard on Safety of Toys EN 71-2:2020

Section	Description	Result
4	Requirements	
4.1	General Requirements	P
4.2	Toys to be worn on the head	N/A
4.3	Toy disguise costumes and toys intended to be worn by a child in play	N/A
4.4	Toys intended to be entered by a child	N/A
4.5	Soft-filled toys	N/A

Remark:

P - Pass, F - Fail, N/A - Not Applicable

TO BE CONTINUED

TEST RESULT

Migration of Certain Elements

Test Request: Migration of certain elements as specified in European Standard on Safety of Toys EN 71-3:2019+A1:2021.

Test Method: General elements, with reference to EN 71-3:2019+A1:2021, analysis was performed by ICP-MS;
Extractable Chromium (VI), with reference to EN 71-3:2019+A1:2021, analysis was performed by IC-ICP-MS;
Extractable organic tin, with reference to EN 71-3:2019+A1:2021, analysis was performed by GC-MS.

Test Item(s):	Unit	Result							
		1	2	3	4	5	6	7	8
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	238	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	100	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	228	ND	311	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	-	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (VI) (Cr VI)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s):	Unit	Result							
		9	10	11	12	13	14	15	16
Category Type		III	III	III	III	III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Extractable Chromium (VI) (Cr VI)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND

Test Item(s):	Unit	Result			
		17	18	19	20
Category Type		III	III	III	III
Extractable Lead (Pb)	mg/kg	ND	ND	ND	ND
Extractable Antimony (Sb)	mg/kg	ND	ND	ND	ND
Extractable Arsenic (As)	mg/kg	ND	ND	ND	ND
Extractable Barium (Ba)	mg/kg	ND	ND	ND	ND
Extractable Cadmium (Cd)	mg/kg	ND	ND	ND	ND
Extractable Mercury (Hg)	mg/kg	ND	ND	ND	ND
Extractable Selenium (Se)	mg/kg	ND	ND	ND	ND
Extractable Boron (B)	mg/kg	ND	ND	ND	ND
Extractable Cobalt (Co)	mg/kg	ND	ND	ND	ND
Extractable Manganese (Mn)	mg/kg	ND	ND	ND	ND
Extractable Strontium (Sr)	mg/kg	ND	ND	ND	ND
Extractable Zinc (Zn)	mg/kg	ND	ND	ND	ND
Extractable Copper (Cu)	mg/kg	ND	ND	ND	ND
Extractable Aluminum (Al)	mg/kg	ND	ND	ND	ND
Extractable Nickel (Ni)	mg/kg	ND	ND	ND	ND
Extractable Tin (Sn)	mg/kg	ND	ND	ND	ND
Extractable Chromium#2	mg/kg	ND	ND	ND	ND
Extractable Organic Tin#1	mg/kg	ND	ND	ND	ND
Extractable Chromium (III) (Cr III) #3	mg/kg	ND	ND	ND	ND
Extractable Chromium (VI) (Cr VI)	mg/kg	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Note:

#1 - The migration of organic tin is expressed as tributyltin.

#2 - If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).

#3 - In particular Chromium (III) is calculated by subtracting the Chromium (VI) concentration from the total chromium concentration.

Remarks:

mg/kg = milligram per kilogram

MDL = Method Detection Limit

ND = Not Detected, less than MDL

Limits –MDL per category type:

Test Item(s):	Unit	Limit	MDL	Limit	MDL	Limit	MDL
Category Type		I		II		III	
Extractable Lead (Pb)	mg/kg	2.0	1.0	0.5	0.2	23	10
Extractable Antimony (Sb)	mg/kg	45	5	11.3	1	560	10
Extractable Arsenic (As)	mg/kg	3.8	0.2	0.9	0.1	47	5
Extractable Barium (Ba)	mg/kg	1500	50	375	10	18750	50
Extractable Cadmium (Cd)	mg/kg	1.3	0.1	0.3	0.05	17	1
Extractable Mercury (Hg)	mg/kg	7.5	0.5	1.9	0.2	94	10
Extractable Selenium (Se)	mg/kg	37.5	2	9.4	1	460	10
Extractable Boron (B)	mg/kg	1200	50	300	10	15000	50
Extractable Cobalt (Co)	mg/kg	10.5	1	2.6	0.2	130	10
Extractable Manganese (Mn)	mg/kg	1200	50	300	10	15000	50
Extractable Strontium (Sr)	mg/kg	4500	50	1125	50	56000	50
Extractable Zinc (Zn)	mg/kg	3750	50	938	50	46000	50
Extractable Copper (Cu)	mg/kg	622.5	10	156	10	7700	50
Extractable Aluminum (Al)	mg/kg	2250	50	560	50	28130	50
Extractable Nickel (Ni)	mg/kg	75	5	18.8	2	930	10
Extractable Tin (Sn)	mg/kg	15000	50	3750	50	180000	50
Extractable Organic Tin	mg/kg	0.9	0.2	0.2	0.2	12	0.2
Extractable Chromium	mg/kg	-	0.02	-	0.005	-	0.02
Extractable Chromium (III) (Cr III)	mg/kg	37.5	2	9.4	1	460	10
Extractable Chromium (VI) (Cr VI)	mg/kg	0.02	0.02	0.005	0.005	0.053	0.02

Category I: dry, brittle, powder-like or pliable toy material

Category II: liquid or sticky toy material

Category III: scrapped-off toy material

“-” = Not Regulated

TO BE CONTINUED

TEST RESULT

Total Cadmium Content

Test Request: Total cadmium content as specified in Commission Regulation (EU) 2016/217 amending entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EPA 3050B:1996, EPA 3052:1996, EN 1122:2001 Method B, acid digestion method was used and total cadmium content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result		
				1	2	3
Cadmium (Cd)	mg/kg	1000	5	ND	11	34

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

Total Cadmium Content

Test Request: Total cadmium content as specified in Commission Regulation (EU) 2016/217 amending entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EPA 3050B:1996, EPA 3052:1996, EN 1122:2001 Method B, acid digestion method was used and total cadmium content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result			
				4	5+6+7	8+9+10	11+12+13
Cadmium (Cd)	mg/kg	100	5	ND	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result		
				14+15+16	17+18+19	20
Cadmium (Cd)	mg/kg	100	5	ND	ND	ND

Remark:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: Phthalates content as specified in entry 51&52 of annex XVII of REACH Regulation (EC) No 1907/2006 and its amendment Commission Regulation (EU) 2018/2005.

Test Method: EPA 3550C:2007, EPA 8270E:2018, solvent extraction and quantification by GC-MS.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1	2	3	4
Di-n-butyl phthalate (DBP)	84-74-2	%	-	0.005	ND	ND	ND	ND
Benzylbutyl phthalate (BBP)	85-68-7	%	-	0.005	ND	ND	ND	ND
Diethylhexyl phthalate (DEHP)	117-81-7	%	-	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	-	0.005	ND	ND	ND	ND
Sum of DEHP, DBP, BBP, DIBP	-	%	0.1	-	ND	ND	ND	ND
Di-n-octyl phthalate (DNOP)	117-84-0	%	-	0.005	ND	ND	ND	ND
Diisononyl phthalate (DINP)	28553-12-0	%	-	0.005	ND	ND	ND	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND	ND	ND	ND
Sum of DNOP, DINP, DIDP	-	%	0.1	-	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					5+6+7	8+9+10	11+12+13	14+15+16
Di-n-butyl phthalate (DBP)	84-74-2	%	-	0.005	ND	ND	ND	ND
Benzylbutyl phthalate (BBP)	85-68-7	%	-	0.005	ND	ND	ND	ND
Diethylhexyl phthalate (DEHP)	117-81-7	%	-	0.005	ND	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	-	0.005	ND	ND	ND	ND
Sum of DEHP, DBP, BBP, DIBP	-	%	0.1	-	ND	ND	ND	ND
Di-n-octyl phthalate (DNOP)	117-84-0	%	-	0.005	ND	ND	ND	ND
Diisononyl phthalate (DINP)	28553-12-0	%	-	0.005	ND	ND	ND	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND	ND	ND	ND
Sum of DNOP, DINP, DIDP	-	%	0.1	-	ND	ND	ND	ND

TO BE CONTINUED

TEST RESULT

Test Item(s)	CAS No.	Unit	Limit	MDL	Result	
					17+18+19	20
Di-n-butyl phthalate (DBP)	84-74-2	%	-	0.005	ND	ND
Benzylbutyl phthalate (BBP)	85-68-7	%	-	0.005	ND	ND
Diethylhexyl phthalate (DEHP)	117-81-7	%	-	0.005	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	-	0.005	ND	ND
Sum of DEHP, DBP, BBP, DIBP	-	%	0.1	-	ND	ND
Di-n-octyl phthalate (DNOP)	117-84-0	%	-	0.005	ND	ND
Diisononyl phthalate (DINP)	28553-12-0	%	-	0.005	ND	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND	ND
Sum of DNOP, DINP, DIDP	-	%	0.1	-	ND	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

MDL = method detection limit

ND = Not detected, less than MDL

"-"= Not Regulated

TO BE CONTINUED

TEST RESULT

Polycyclic Aromatic Hydrocarbons (PAHs)

Test Request: Polycyclic Aromatic Hydrocarbons (PAHs) content as specified in entry 50 of Annex XVII of REACH Regulation (EC) No 1907/2006 and its latest amendment.

Test Method: Solvent extraction and quantification by gas chromatography-mass selective detection (GC-MS) with respect to AfPS GS 2019:01 PAK

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					1	2	3	4
Benzo(a)anthracene	56-55-3	mg/kg	0.5	0.1	ND	ND	ND	ND
Chrysene	218-01-9	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(j)fluoranthene	205-82-3	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(a)pyrene	50-32-8	mg/kg	0.5	0.1	ND	ND	ND	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(e)pyrene	192-97-2	mg/kg	0.5	0.1	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result			
					5+6 +7	8+9 +10	11+12 +13	14+15 +16
Benzo(a)anthracene	56-55-3	mg/kg	0.5	0.1	ND	ND	ND	ND
Chrysene	218-01-9	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(j)fluoranthene	205-82-3	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(a)pyrene	50-32-8	mg/kg	0.5	0.1	ND	ND	ND	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.5	0.1	ND	ND	ND	ND
Benzo(e)pyrene	192-97-2	mg/kg	0.5	0.1	ND	ND	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result	
					17+18+19	20
Benzo(a)anthracene	56-55-3	mg/kg	0.5	0.1	ND	ND
Chrysene	218-01-9	mg/kg	0.5	0.1	ND	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	0.5	0.1	ND	ND
Benzo(j)fluoranthene	205-82-3	mg/kg	0.5	0.1	ND	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	0.5	0.1	ND	ND
Benzo(a)pyrene	50-32-8	mg/kg	0.5	0.1	ND	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.5	0.1	ND	ND
Benzo(e)pyrene	192-97-2	mg/kg	0.5	0.1	ND	ND

Remarks:

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

END OF THE REPORT