

Gohandmade Dsign International A/S
HANNE
Madevej 11-13, 6200
Aabenraa, Denmark
DENMARK

Report No.: 02135-1 SHA22
Date: 06.05.22
Order No.: 22P-002505
Date of order: 26.04.22
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Test Report

Order description:

Chemical Test

Article Name	Silicone products
Material	Silicone
Colour	Pink
External customer	Buyer:Gohandmade Dsign International A/S
Condition of sample at delivery	no defects
Arrival date	26.04.22
Test start date	26.04.22
Test end date	06.05.22



Limit lists

Chem.	Limit values according to legal requirements
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Final conclusion: PASS

Test results and evaluation are only related to tested items and to performed methods. Detailed information regarding measurement uncertainties are available on request. Unless otherwise stated, the statement of conformity decision will be made without taking the measurement uncertainty into account.

Justin Zhu
Reporting Team Supervisor in Chemical Lab

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Summary

22-009906-01 - Silicone products

Age Group: Infant
Type: Skin Contact
Countries of Distribution: Denmark

All test results comply with the requirements according to the scope of analysis.

Remark: All test items were subcontracted to external laboratory.

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Overview of Chem. testing

Sample no	Type / Style
22-009906-01	-

Component list

No	Components
01	main body(all styles)

Customer requirements evaluation

	Components			
	Tested	Result	Failed	Not tested
Colourants (EN 71-9)	01	PASS		
Directive 2009/48/EC Safety of Toys as Amended by 2017/774/EU, Phenol in Toys	01	PASS		
Directive 2009/48/EC Safety of Toys as Amended by 2017/898/EU, Bisphenol A (BPA) in Toys	01	PASS		
Directive 2009/48/EC Safety of Toys as Amended by Directive (EU) 2019/1929, Formaldehyde in Polymeric Materials	01	PASS		
Flame retardants in toy - TCEP, TCPP, TDCPP (LC-MS)	01	PASS		
Migration of certain elements(EN 71-3 Category 3)	01	PASS		
Organotin compounds	01	PASS		
Phthalates	01	PASS		
Polycyclic aromatic hydrocarbons (PAHs)	01	PASS		
Primary aromatic amines (EN 71-9)	01	PASS		
Short chain chlorinated paraffins(SCCP)	01	PASS		
Total Cadmium	01	PASS		

Legend: Chem.: chemical tests, Phys.: physical tests, m.s.: composite sample, n.d.: not determined, n.a.: not applicable, n.t.: not tested, i.m.: insufficient material, sum: see summary, s.c.: see component, pos: positive, neg: negative, min: minimum limit, max: maximum limit, BL: below limit, IN: inconclusive

Detailed results of Chem. testing

Sample no: 22-009906-01

Colourants (EN 71-9)

Sample type: Chem.

Norm: DIN EN 71-9 /-10 /-11

			01
Parameter	Unit	Limit	Result
Disperse Blue 1 EN 71-9	mg/kg	10	<10
Disperse Blue 106 EN 71-9	mg/kg	10	<10
Disperse Blue 3 EN 71-9	mg/kg	10	<10
Disperse Blue 124 EN 71-9	mg/kg	10	<10
Disperse Orange 3 EN 71-9	mg/kg	10	<10
Disperse Yellow 3 EN 71-9	mg/kg	10	<10
Disperse Orange 37 / 76 EN 71-9	mg/kg	10	<10
Disperse Red 1 EN 71-9	mg/kg	10	<10
Solvent Yellow 1 EN 71-9	mg/kg	10	<10
Solvent Yellow 2 EN 71-9	mg/kg	10	<10
Solvent Yellow 3 EN 71-9	mg/kg	10	<10
Basic Red 9 EN 71-9	mg/kg	10	<10
Basic Violet 1 EN 71-9	mg/kg	10	<10
Basic Violet 3 EN 71-9	mg/kg	10	<10
Acid Violet 49 EN 71-9	mg/kg	10	<10
Acid Red 26 EN 71-9	mg/kg	10	<10
Evaluation			PASS

Directive 2009/48/EC Safety of Toys as Amended by 2017/774/EU, Phenol in Toys

Sample type: Chem.

Norm: EN 71-10:2005# and EN 71-11:2005#

			01
Parameter	Unit	Limit	Result
Pentachlorophenol	mg/L	5	<0.5
Evaluation			PASS

Directive 2009/48/EC Safety of Toys as Amended by 2017/898/EU, Bisphenol A (BPA) in Toys

Sample type: Chem.

Norm: EN 71-10:2005 Clause 6, EN 71-11:2005 Clause 5.5.2

			01
Parameter	Unit	Limit	Result
Bisphenol A (2,2-Bis(4-hydroxyphenyl)propane) per article weight	mg/L	0.04	<0.04
Evaluation			PASS

Directive 2009/48/EC Safety of Toys as Amended by Directive (EU) 2019/1929, Formaldehyde in Polymeric Materials

Sample type: Chem.

Norm: EN 71-10:2005#, EN 71-11:2005#

			01
Parameter	Unit	Limit	Result
Formaldehyde	mg/L	1.5	<0.5
Evaluation			PASS

Flame retardants in toy - TCEP, TCPP, TDCPP (LC-MS)

Sample type: Chem.

Norm: DIN EN 71-9/-10/-11

			01
Parameter	Unit	Limit	Result
Tris(2-chlorethyl)-phosphate	mg/kg	5	<5
Tris(2-chlorisopropyl)phosphate	mg/kg	5	<5
Tris(1,3-dichlor-2-propyl)phosphate	mg/kg	5	<5
Evaluation			PASS

Migration of certain elements(EN 71-3 Category 3)

Sample type: Chem.

Norm: EN 71-3

			01
Parameter	Unit	Limit	Result
Lead (Pb) EN 71-3 category 3	mg/kg	23	<10
Antimony (Sb): EN 71-3 category 3	mg/kg	560	<10
Arsenic (As) EN 71-3 category 3	mg/kg	47	<10
Barium (Ba): EN 71-3 category 3	mg/kg	18750	<50
Cadmium (Cd): EN 71-3 category 3	mg/kg	17	<5
Chromium III (Cr III) EN 71-3 category 3	mg/kg	460	<0.2
Chromium VI (Cr VI) EN 71-3 category 3	mg/kg	0.053	<0.053
Mercury (Hg) EN 71-3 category 3	mg/kg	94	<10
Selenium (Se): EN 71-3 category 3	mg/kg	460	<10
Boron (B): EN 71-3 category 3	mg/kg	15000	<50
Cobalt (Co): EN 71-3 category 3	mg/kg	130	<10
Manganese (Mn): EN 71-3 category 3	mg/kg	15000	<50
Strontium (Sr): EN 71-3 category 3	mg/kg	56000	<50
Tin (Sn): EN 71-3 category 3	mg/kg	180000	<1
Zinc (Zn): EN 71-3 category 3	mg/kg	46000	<50
Copper (Cu): EN 71-3 category 3	mg/kg	7700	<50
Aluminum (Al): EN 71-3 category 3	mg/kg	28130	<50
Nickel (Ni): EN 71-3 category 3	mg/kg	930	<50
Organo tin compounds DIn EN 71-3 category 3	mg/kg	12	<3.3
Evaluation			PASS

Organotin compounds

Sample type: Chem.

Norm: CEN ISO/TS 16179(mod.)

			01
Parameter	Unit	Limit	Result
Dibutyltin (DBT)	mg/kg	1000	<0.1
Diocetyl tin (DOT)	mg/kg	1000	<0.1
Triphenyltin (TPhT)	mg/kg	1000	<0.1
Tributyltin (TBT)	mg/kg	1000	<0.1
Evaluation			PASS

Phthalates

Sample type: Chem.

Norm: DIN EN ISO 14389(mod.)

			01
Parameter	Unit	Limit	Result
Dibutyl phthalate / DBP	%	0.1	<0.015
Butylbenzyl phthalate/ BBP	%	0.1	<0.015
Di-(2ethylhexyl)-phthalate / DEHP	%	0.1	<0.015
Di-n-octylphthalate / DNOP	%	0.1	<0.015
Di-iso-nonylphthalate / DINP	%	0.1	<0.015
Di-iso-decylphthalate / DIDP	%	0.1	<0.015
Di-iso-butylphthalate / DIBP	%	0.1	<0.015
Plasticizer - phthalic acid esters: DINP, DIDP, DNOP	%	0.1	<0.1
Plasticizers - Phthalates: DEHP, DBP, DIBP, BBP	%	0.1	<0.1
Evaluation			PASS

Polycyclic aromatic hydrocarbons (PAHs)

Sample type: Chem.

Norm: AfPS GS 2019:01 PAK

			01
Parameter	Unit	Limit	Result
Benzo[a]pyrene	mg/kg	0.5	<0.2
Benzo[e]pyrene	mg/kg	0.5	<0.2
Benzo[a]anthracene	mg/kg	0.5	<0.2
Benzo[b]fluoranthene	mg/kg	0.5	<0.2
Benzo[j]fluoranthene	mg/kg	0.5	<0.2
Benzo[k]fluoranthene	mg/kg	0.5	<0.2
Chrysene	mg/kg	0.5	<0.2
Dibenzo[a,h]anthracene	mg/kg	0.5	<0.2
Evaluation			PASS

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Primary aromatic amines (EN 71-9)

Sample type: Chem.

Norm: DIN EN 71-9 /-10 /-11

			01
Parameter	Unit	Limit	Result
Benzidine	mg/kg	5	<5
2-Naphthylamine	mg/kg	5	<5
4-Chloroaniline	mg/kg	5	<5
3,3' -Dichlorobenzidine	mg/kg	5	<5
3,3' -Dimethoxybenzidine	mg/kg	5	<5
3,3' -dimethylbenzidine	mg/kg	5	<5
o-Toluidine	mg/kg	5	<5
o-Anisidine	mg/kg	5	<5
Aniline	mg/kg	5	<5
Evaluation			PASS

Short chain chlorinated paraffins(SCCP)

Sample type: Chem.

Norm: DIN EN ISO 18219 (mod.)

			01
Parameter	Unit	Limit	Result
Short chain chlorinated paraffins C10-C13 (SCCP)	mg/kg	1500	<100
Evaluation			PASS

Total Cadmium

Sample type: Chem.

Norm: EPA 3015 A;EN ISO 17294-2;EN 16711-1

			01
Parameter	Unit	Limit	Result
Cadmium (Cd):total content	mg/kg	100	<15
Evaluation			PASS

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The tested item was selected by the client. Remaining test material is disposed after 3 months. The report must not be reproduced except in full content without the written approval of the testing laboratory. The report is signed digitally and password protected. For printing use the print option -document and comments-. The amount of minor components may be insufficient to perform the announced tests. In this case the test report will carry the mark: component insufficient for lab test. If testing of all components is required we need a sufficient amount of all minor components.

Colourants (EN 71-9)

Test method: DIN EN 71-9 /-10 /-11

standardized method

Analysis by LC-MS

Parameter	CAS No	Parameter	CAS No
Acid Red 26 EN 71-9	3761-53-3	Disperse Blue 3 EN 71-9	2475-46-9
Acid Violet 49 EN 71-9	1694-09-3	Disperse Orange 3 EN 71-9	730-40-5
Basic Red 9 EN 71-9	569-61-9	Disperse Orange 37 / 76 EN 71-9	13301-61-6
Basic Violet 1 EN 71-9	8004-87-3	Disperse Red 1 EN 71-9	2872-52-8
Basic Violet 3 EN 71-9	548-62-9	Disperse Yellow 3 EN 71-9	2832-40-8
Disperse Blue 1 EN 71-9	2475-45-8	Solvent Yellow 1 EN 71-9	119-15-3
Disperse Blue 106 EN 71-9	12223-01-7	Solvent Yellow 2 EN 71-9	60-11-7
Disperse Blue 124 EN 71-9	61951-51-7	Solvent Yellow 3 EN 71-9	97-56-3

Directive 2009/48/EC Safety of Toys as Amended by 2017/774/EU, Phenol in Toys

Test method: EN 71-10:2005# and EN 71-11:2005#

standardized method

Parameter	CAS No	Parameter	CAS No
Pentachlorophenol	87-86-5		

Directive 2009/48/EC Safety of Toys as Amended by 2017/898/EU, Bisphenol A (BPA) in Toys

Test method: EN 71-10:2005 Clause 6, EN 71-11:2005 Clause 5.5.2

standardized method

Liquid Chromatography with Mass Spectrometry Mass Spectrometry

Directive 2009/48/EC Safety of Toys as Amended by Directive (EU) 2019/1929, Formaldehyde in Polymeric Materials

Test method: EN 71-10:2005#, EN 71-11:2005#

standardized method

Flame retardants in toy - TCEP, TCPP, TDCPP (LC-MS)

Test method: DIN EN 71-9/-10/-11

validated in house method

Extraction with organic solvent, and analysis was performed by LC-MS.

Parameter	CAS No	Parameter	CAS No
Tris(1,3-dichlor-2-propyl)phosphate	13674-87-8	Tris(2-chlorisopropyl)phosphate	13674-84-5
Tris(2-chlorethyl)-phosphate	115-96-8		

Migration of certain elements(EN 71-3 Category 3)

Test method: EN 71-3

standardized method

Extractable Chromium(VI)& Extractable Chromium (III) - With reference to EN 71 Part 3, analysis was performed by HPLC-ICP-MS.
Elements - With reference to EN 71 Part 3, analysis was performed by ICP-MS.
Extractable Organic Tin -With reference to EN 71 Part 3, analysis was performed by GC-MS.

Parameter	CAS No	Parameter	CAS No
Aluminum (Al): EN 71-3 category 3	7429-90-5	Lead (Pb) EN 71-3 category 3	7439-92-1
Antimony (Sb): EN 71-3 category 3	7440-36-0	Manganese (Mn): EN 71-3 category 3	7439-96-5
Arsenic (As) EN 71-3 category 3	7440-38-2	Mercury (Hg) EN 71-3 category 3	7439-97-6
Barium (Ba): EN 71-3 category 3	7440-39-3	Nickel (Ni): EN 71-3 category 3	7440-02-0
Boron (B): EN 71-3 category 3	7440-42-8	Organo tin compounds DIN EN 71-3 category 3	
Cadmium (Cd): EN 71-3 category 3	7440-43-9	Selenium (Se): EN 71-3 category 3	7782-49-2
Chromium III (Cr III) EN 71-3 category 3		Strontium (Sr): EN 71-3 category 3	7440-24-6
Chromium VI (Cr VI) EN 71-3 category 3		Tin (Sn): EN 71-3 category 3	7440-31-5
Cobalt (Co): EN 71-3 category 3	7440-48-4	Zinc (Zn): EN 71-3 category 3	7440-66-6
Copper (Cu): EN 71-3 category 3	7440-50-8		

Organotin compounds

Test method: CEN ISO/TS 16179(mod.)

standardized method

Parameter	CAS No	Parameter	CAS No
Dibutyltin (DBT)		Tributyltin (TBT)	
Diocetyl tin (DOT)	15231-44-4	Triphenyltin (TPhT)	

Phthalates

Test method: DIN EN ISO 14389(mod.)

standardized method

With reference to ISO 14389 ,Analysis by GC/MS

Parameter	CAS No	Parameter	CAS No
1,2-Benzenedicarboxylic acid, di-C6-8- branched alkyl esters, C7-rich	71888-89-6	Dibutyl phthalate / DBP	84-74-2
Bis(2-methoxyethyl) phthalate / BMEP	117-82-8	Di-iso-nonylphthalate / DINP	28553-12-0
Butylbenzyl phthalate/ BBP	85-68-7	Diisopentylphthalate / DIPP	605-50-5
Di-(2ethylhexyl)-phthalate / DEHP	117-81-7	Di-n-hexylphthalate / DnHP	84-75-3
Di-iso-butylphthalate / DIBP	84-69-5	Di-n-octylphthalate / DNOP	117-84-0
Di-iso-decylphthalate / DIDP	26761-40-0	Di-n-pentylphthalate / DNPP	131-18-0

Polycyclic aromatic hydrocarbons (PAHs)

Test method: AfPS GS 2019:01 PAK

standardized method

Extract 500 mg sample in toluene by ultrasonic bath at 60C for 60 minutes. Detection performed by GC-MS selective detector in the SIM mode.

Parameter	CAS No	Parameter	CAS No
Acenaphthene	83-32-9	Benzo[k]fluoranthene	207-08-9
Acenaphthylene	208-96-8	Chrysene	218-01-9
Anthracene	120-12-7	Dibenzo[a,h]anthracene	53-70-3
Benzo(g,h,i)perylene	191-24-2	Fluoranthene	206-44-0
Benzo[a]anthracene	56-55-3	Fluorene	86-73-7
Benzo[a]pyrene	50-32-8	Indeno[1,2,3-cd]pyrene	193-39-5
Benzo[b]fluoranthene	205-99-2	Naphthalene	91-20-3
Benzo[e]pyrene	192-97-2	Phenanthrene	85-01-8
Benzo[j]fluoranthene	205-82-3	Pyrene	129-00-0

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Primary aromatic amines (EN 71-9)

Test method: DIN EN 71-9 /-10 /-11

standardized method

Parameter	CAS No	Parameter	CAS No
2-Naphthylamine	91-59-8	Aniline	62-53-3
3,3' -Dichlorobenzidine	91-94-1	Benzidine	92-87-5
3,3' -Dimethoxybenzidine	119-90-4	o-Anisidine	90-04-0
3,3' -dimethylbenzidine	119-93-7	o-Toluidine	95-53-4
4-Chloroaniline	106-47-8		

Short chain chlorinated paraffins(SCCP)

Test method: DIN EN ISO 18219 (mod.)

standardized method

With reference to DIN EN ISO 18219 (mod.) ,Analysis by GC/MS

Parameter	CAS No	Parameter	CAS No
Short chain chlorinated paraffins C10-C13 (SCCP)	85535-84-8		

Total Cadmium

Test method: EPA 3015 A;EN ISO 17294-2;EN 16711-1

standardized method

Parameter	CAS No	Parameter	CAS No
Cadmium (Cd)	7440-43-9		