

Test Report No.: 70.452.22.11813.01

Dated: 2022-08-24



Greater China

Applicant: POLYGROUP PACIFIC LTD
Address: UNIT 606, 6TH FLOOR, FAIRMONT HOUSE, 8 COTTON TREE DRIVE, CENTRAL, HONG KONG
Product Name: 5FT Summer Waves® Small Quick Set® Pool
5FT Summer Waves® Small Quick Set® Pool
5FT Summer Waves® Quick Set® Ring Pool
5FT Summer Waves® Small Quick Set® Pool
Style No.: P1000515A, P1000515C, P10005150, P1000515B
Receipt Date of Sample: 2022-06-30
Date of Testing: 2022-06-30 to 2022-08-24
Sample Submitted: The sample(s) was (were) submitted by applicant and identified.
Test Result: Refer to the data listed in following pages

Test Item	Conclusion
1. EN 71-1:2014+A1:2018 Mechanical and Physical Properties	Pass
2. EN 71-2:2020 Flammability	Pass
3. EN 71-8:2018 Activity toys for domestic use	Pass
4. Polycyclic Aromatic Hydrocarbons (PAHs) Content in Annex XVII item 50 of the REACH Regulation (EC) No 1907/2006 with its Amendments	Pass
5. Total Cadmium Content Requirement in Annex XVII, Item 23 of the REACH Regulation(EC) No 1907/2006 with its Amendments	Pass
6. EN 71-3:2019+A1:2021- Migration of certain elements	Pass
7. Phthalates Content	Pass
8. Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs) Content - European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs)	Pass
9. Organotin Content Requirement in Annex XVII, Item 20 of the REACH Regulation(EC) No 1907/2006 with its Amendments	Pass
10. Screening of 224 Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) based on Regulation (EC) No.1907/2006 (REACH)	<0.1%(W/W)

Screening of 1 Substances of Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) based on Regulation (EC) No 1907/2006 concerning the REACH.

Remarks: 1. MDL = Method Detection Limit
2. ND = Not Detected (<MDL)
3. <= Less than
4. 1 mg/kg = 1 ppm = 0.0001%



TÜV SÜD Certification and Testing (China) Co.,Ltd. Shanghai Branch
Testing Center

Prepared by:



Jenny Yao
Technical Engineer

Authorized by:

Sawyer Tang
Technical Manager

Note:

- (1) The TÜV SÜD Certification and Testing (China) Co., Ltd. "General Terms & Conditions" applied.
Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production.
For further details, please see "Testing and certification regulation", chapter A-3.4
For full version, please visit: EN : <https://www.tuvsud.cn/zh-cn/resource/terms-and-conditions---en> ; SCN: <https://www.tuvsud.cn/zh-cn/terms-and-conditions> ; TCN: <https://www.tuvsud.com/zh-tw/terms-and-conditions>
- (2) The results relate only to the Items tested.
- (3) The test report shall not be reproduced except in full without the written approval of the laboratory
- (4) Disclaimer Measurement Uncertainty:
Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values without any considerations of measurement uncertainties.
Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

Description of the Tested Subject

Sample	Description	Photo
001	5FT Summer Waves® Small Quick Set® Pool - P1000515A	
002	5FT Summer Waves® Small Quick Set® Pool - P1000515C	
003	5FT Summer Waves® Quick Set® Ring Pool - P10005150	
004	5FT Summer Waves® Small Quick Set® Pool - P1000515B	



T. No	Sample	Description
T1	001	5FT Summer Waves® Small Quick Set® Pool - P1000515A
T2	002	5FT Summer Waves® Small Quick Set® Pool - P1000515C
T3	003	5FT Summer Waves® Quick Set® Ring Pool - P10005150
T4	004	5FT Summer Waves® Small Quick Set® Pool - P1000515B
T5	005	Blue soft plastic with colorful coating (body, 001)
T6	006	Light blue soft plastic (bottom, 001)
T7	007	Light blue soft plastic (binding, 001)
T8	008	Transparent soft plastic (valve, 001/002/003/004)
T9	009	Transparent soft plastic (repair stick, 001/002/003/004)
T10	010	Blue soft plastic with colorful coating (body, 002)
T11	011	Light blue soft plastic (bottom, 002)
T12	012	Yellow soft plastic (binding, 002)
T13	013	Blue soft plastic with colorful coating (body, 003)
T14	014	Light blue soft plastic (bottom, 003)
T15	015	Dark blue soft plastic (binding, 003)
T16	016	Light blue soft plastic (bottom, 004)
T17	017	Blue soft plastic with white coating (body, 004)
T18	018	Pink soft plastic (binding, 004)





Test Results

1. EN 71-1:2014+A1:2018 Mechanical and Physical Properties

Sample	001,002,003,004
Labelled age range	2+
Requested age range	Over 2 years
Age range in testing	Over 2 years

Clause	Requirement	Evaluation
4	General Requirements	--
4.1	Material cleanliness	P
4.2	Assembly	P
4.3	Flexible plastic sheeting	P
4.7	Edges	P
4.8	Points and metallic wires	P
4.18	Aquatic toys and inflatable toys	P
5	Toys intended for children under 36 months	--
5.1	General requirements	P

Abbreviation:

P = Pass, F = Fail, NA = Not Applicable, NR = Not Requested.

Note:

Only applicable clauses were shown.

Labelling requirement (Washing/Cleaning instruction, CE marking, Importer / Manufacturer name and address, Product identification) according to the Directive 2009/48/EC-Safety of toys.

	Result (On Package)	Result (On Product)
CE Marking	Present	Present
Importer's/Manufacturer's Name and Address (EU)	Present	Present
Product Identification	Present	Present

The following marking shall be fulfilled.

- The CE marking is subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008. The CE marking shall be affixed visibly, legibly and indelibly to the toy, to an affixed label to the packaging, or to the counter display.
- The manufacturer's name and address, importer's name and address in the EU shall be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy.
- The toys shall bear a type, batch, serial or model number or other element allowing their identification, or where the size or nature of the toy does not allow it, that the required information is provided on the packaging or in a document accompanying the toy.

	Result (On Package)	Result (On Product)
Washing/Cleaning instruction	Not Applicable	Not Applicable

A toy intended for use by children under 36 months must be designed and manufactured in such a way that it can be cleaned. A textile toy must, to this end, be washable, except if it contains a mechanism that may be damaged if soaked. The manufacturer should, if applicable, provide instructions on how the toy has to be cleaned.



2. EN 71-2:2020 Flammability

Sample		001,002,003,004
Clause	Requirement	Evaluation
4.1	General Requirement	P

Abbreviation:

P = Pass, F = Fail, NA = Not Applicable, NR = Not Requested.

Note:

Only applicable clauses were shown.

3. EN 71-8:2018 Activity toys for domestic use

Sample		001,002,003,004
Labelled age range	2+	
Requested age range	Over 2 years	
Age range in testing	Over 2 years	

Clause	Requirement	Evaluation
4	Requirements	--
4.1	General	--
4.1.1	Assembly	P
4.1.3	Maximum height	P
4.1.4	Corners and edges	P
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	P
4.9	Paddling pools	--
4.9.2	Paddling pools with inflatable walls	P
5	Warning, markings, and instructions	--
5.1	Warnings and markings	--
5.1.1	General	P
5.1.2	Paddling pools	P
5.2	Assembly and installation instructions	P
5.3	Maintenance	P

Abbreviation:

P = Pass, F = Fail, NA = Not Applicable, NR = Not Requested.

Note:

- Only applicable clauses were shown.

4. Polycyclic Aromatic Hydrocarbons (PAHs) Content in Annex XVII item 50 of the REACH Regulation (EC) No 1907/2006 with its Amendments

Test with reference to AfPS GS 2019:01, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005	006+007+008
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<0.5	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<0.5	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<0.5	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<0.5	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<0.5	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<0.5	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<0.5	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<0.5	ND	ND
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					009+011+012	010
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<0.5	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<0.5	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<0.5	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<0.5	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<0.5	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<0.5	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<0.5	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<0.5	ND	ND
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013	014+015+016
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<0.5	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<0.5	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<0.5	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<0.5	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<0.5	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<0.5	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<0.5	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<0.5	ND	ND
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					017+018	
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<0.5	ND	
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<0.5	ND	
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<0.5	ND	
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<0.5	ND	
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<0.5	ND	
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<0.5	ND	
Chrysene (CHR)	218-01-9	mg/kg	0.1	<0.5	ND	
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<0.5	ND	
Conclusion					Pass	

5. Total Cadmium Content Requirement in Annex XVII, Item 23 of the REACH Regulation(EC) No 1907/2006 with its Amendments

Test with reference to Acid digestion and EN 1122:2001 Method B, determination by ICP-OES/ICP-MS.

Sample	Unit	MDL	Limit	Result(s)	Conclusion
005	mg/kg	10	<100	<10.0	Pass
006+007+008	mg/kg	10	<100	<10.0	Pass
009+011+012	mg/kg	10	<100	<10.0	Pass
010	mg/kg	10	<100	<10.0	Pass
013	mg/kg	10	<100	<10.0	Pass
014+015+016	mg/kg	10	<100	<10.0	Pass
017+018	mg/kg	10	<100	<10.0	Pass



6. EN 71-3:2019+A1:2021- Migration of certain elements

Test with reference to EN 71-3:2019+A1:2021, determination by ICP-MS.

Test Item	Limit in scraped-off toy materials [mg/kg]	MDL [mg/kg]	Result(s) [mg/kg]					
			005	006	007	008	009	010
Soluble Aluminum	28130	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Antimony	560	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Arsenic	47	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Barium	18750	5.00	<5.00	22.5	5.95	<5.00	<5.00	<5.00
Soluble Boron	15000	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Cadmium	17	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Chromium III	460	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Soluble Chromium VI	0.053	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Soluble Cobalt	130	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Copper	7700	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Lead	23	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Manganese	15000	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Mercury	94	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Nickel	930	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Selenium	460	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Strontium	56000	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Tin	180000	2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Organic Tin	12	7.50	<7.50	<7.50	<7.50	<7.50	<7.50	<7.50
Soluble Zinc	46000	5.00	<5.00	12.1	8.20	<5.00	<5.00	<5.00
Conclusion			Pass	Pass	Pass	Pass	Pass	Pass



Test Item	Limit in scraped-off toy materials [mg/kg]	MDL [mg/kg]	Result(s) [mg/kg]					
			011	012	013	014	015	016
Soluble Aluminum	28130	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Antimony	560	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Arsenic	47	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Barium	18750	5.00	25.0	17.0	6.69	25.9	21.6	7.24
Soluble Boron	15000	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Cadmium	17	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Chromium III	460	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Soluble Chromium VI	0.053	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Soluble Cobalt	130	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Copper	7700	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Lead	23	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Manganese	15000	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Mercury	94	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Nickel	930	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Selenium	460	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Strontium	56000	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Soluble Tin	180000	2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Organic Tin	12	7.50	<7.50	<7.50	<7.50	<7.50	<7.50	<7.50
Soluble Zinc	46000	5.00	9.76	5.98	<5.00	11.2	7.46	5.98
Conclusion			Pass	Pass	Pass	Pass	Pass	Pass

Test Report

No.: 70.452.22.11813.01

Dated: 2022-08-24



Greater China

Test Item	Limit in scraped-off toy materials [mg/kg]	MDL [mg/kg]	Result(s) [mg/kg]	
			017	018
Soluble Aluminum	28130	5.00	<5.00	<5.00
Soluble Antimony	560	5.00	<5.00	<5.00
Soluble Arsenic	47	5.00	<5.00	<5.00
Soluble Barium	18750	5.00	<5.00	17.3
Soluble Boron	15000	5.00	<5.00	<5.00
Soluble Cadmium	17	5.00	<5.00	<5.00
Soluble Chromium III	460	0.04	<0.04	<0.04
Soluble Chromium VI	0.053	0.04	<0.04	<0.04
Soluble Cobalt	130	5.00	<5.00	<5.00
Soluble Copper	7700	5.00	<5.00	<5.00
Soluble Lead	23	5.00	<5.00	<5.00
Soluble Manganese	15000	5.00	<5.00	<5.00
Soluble Mercury	94	5.00	<5.00	<5.00
Soluble Nickel	930	5.00	<5.00	<5.00
Soluble Selenium	460	5.00	<5.00	<5.00
Soluble Strontium	56000	5.00	<5.00	<5.00
Soluble Tin	180000	2.50	<2.50	<2.50
Organic Tin	12	7.50	<7.50	<7.50
Soluble Zinc	46000	5.00	<5.00	6.74
Conclusion			Pass	Pass

7. Phthalates Content

Test with reference to in house method and determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005	006+007+008
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	-	ND	ND
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	-	ND	ND
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	-	ND	ND
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	-	ND	ND
Sum of DBP, BBP, DEHP, DIBP	-	%	0.005	<0.1	ND	ND
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	-	ND	ND
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	-	ND	ND
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	-	ND	ND
1,2-Benzenedicarboxylic acid,dipentylester branched and linear (DPP)	84777-06-0	%	0.005	<0.1	ND	ND
sum of DINP, DIDP, DNOP	-	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylicacid, di-C6-8-branched alkyl esters,C7-rich (DIHP)	71888-89-6	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	%	0.005	<0.1	ND	ND
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	68515-51-5, 68648-93-1	%	0.005	<0.1	ND	ND
Bis(2-methoxyethyl)phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylicacid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4	%	0.005	<0.1	ND	ND
Di-iso-hexyl phthalate,DiHxP	71850-09-4	%	0.005	<0.1	ND	ND
Diisopentyl phthalate (DiPP)	605-50-5	%	0.005	<0.1	ND	ND
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	<0.1	ND	ND
Dipentyl phthalate (DPP)	131-18-0	%	0.005	<0.1	ND	ND
n-Pentyl-isopentylphthalate (nPiPP)	776297-69-9	%	0.005	<0.1	ND	ND
Dipropylheptyl phthalate(DPHP)	53306-54-0	%	0.005	<0.1	ND	ND
Conclusion					Pass	Pass

Test Report

No.: 70.452.22.11813.01

Dated: 2022-08-24



Greater China

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					009+011+012	010
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	-	ND	ND
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	-	ND	ND
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	-	ND	ND
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	-	ND	ND
Sum of DBP, BBP, DEHP, DIBP	-	%	0.005	<0.1	ND	ND
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	-	ND	ND
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	-	ND	ND
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	-	ND	ND
1,2-Benzenedicarboxylic acid,dipentylester branched and linear (DPP)	84777-06-0	%	0.005	<0.1	ND	ND
sum of DINP, DIDP, DNOP	-	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylicacid, di-C6-8-branched alkyl esters,C7-rich (DIHP)	71888-89-6	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	%	0.005	<0.1	ND	ND
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	68515-51-5, 68648-93-1	%	0.005	<0.1	ND	ND
Bis(2-methoxyethyl)phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylicacid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4	%	0.005	<0.1	ND	ND
Di-iso-hexyl phthalate,DiHxP	71850-09-4	%	0.005	<0.1	ND	ND
Diisopentyl phthalate (DiPP)	605-50-5	%	0.005	<0.1	ND	ND
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	<0.1	ND	ND
Dipentyl phthalate (DPP)	131-18-0	%	0.005	<0.1	ND	ND
n-Pentyl-isopentylphthalate (nPiPP)	776297-69-9	%	0.005	<0.1	ND	ND
Dipropylheptyl phthalate(DPHP)	53306-54-0	%	0.005	<0.1	ND	ND
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013	014+015+016
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	-	ND	ND
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	-	ND	ND
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	-	ND	ND
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	-	ND	ND
Sum of DBP, BBP, DEHP, DIBP	-	%	0.005	<0.1	ND	ND
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	-	ND	ND
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	-	ND	ND
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	-	ND	ND
1,2-Benzenedicarboxylic acid,dipentylester branched and linear (DPP)	84777-06-0	%	0.005	<0.1	ND	ND
sum of DINP, DIDP, DNOP	-	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters,C7-rich (DIHP)	71888-89-6	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	%	0.005	<0.1	ND	ND
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	68515-51-5, 68648-93-1	%	0.005	<0.1	ND	ND
Bis(2-methoxyethyl)phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4	%	0.005	<0.1	ND	ND
Di-iso-hexyl phthalate,DiHxP	71850-09-4	%	0.005	<0.1	ND	ND
Diisopentyl phthalate (DiPP)	605-50-5	%	0.005	<0.1	ND	ND
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	<0.1	ND	ND
Dipentyl phthalate (DPP)	131-18-0	%	0.005	<0.1	ND	ND
n-Pentyl-isopentylphthalate (nPiPP)	776297-69-9	%	0.005	<0.1	ND	ND
Dipropylheptyl phthalate(DPHP)	53306-54-0	%	0.005	<0.1	ND	ND
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)
					017+018
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	-	ND
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	-	ND
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	-	ND
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	-	ND
Sum of DBP, BBP, DEHP, DIBP	-	%	0.005	<0.1	ND
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	-	ND
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	-	ND
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	-	ND
1,2-Benzenedicarboxylic acid,dipentylester branched and linear (DPP)	84777-06-0	%	0.005	<0.1	ND
sum of DINP, DIDP, DNOP	-	%	0.005	<0.1	ND
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters,C7-rich (DIHP)	71888-89-6	%	0.005	<0.1	ND
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	%	0.005	<0.1	ND
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	68515-51-5, 68648-93-1	%	0.005	<0.1	ND
Bis(2-methoxyethyl)phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	<0.1	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	0.005	<0.1	ND
Di-iso-hexyl phthalate,DiHxP	71850-09-4	%	0.005	<0.1	ND
Diisopentyl phthalate (DiPP)	605-50-5	%	0.005	<0.1	ND
Di-n-hexyl phthalate (DHP)	84-75-3	%	0.005	<0.1	ND
Dipentyl phthalate (DPP)	131-18-0	%	0.005	<0.1	ND
n-Pentyl-isopentylphthalate (nPiPP)	776297-69-9	%	0.005	<0.1	ND
Dipropylheptyl phthalate(DPHP)	53306-54-0	%	0.005	<0.1	ND
Conclusion					Pass

Remark: 1. Limit was according to client's requirement

8. Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs) Content - European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs)

Test with reference to in house method, determination by GC-MS-NCI.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005	006+007+008
SCCP	85535-84-8	mg/kg	100	<1500	<100	<100
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					009+011+012	010
SCCP	85535-84-8	mg/kg	100	<1500	<100	<100
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013	014+015+016
SCCP	85535-84-8	mg/kg	100	<1500	<100	<100
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					017+018	
SCCP	85535-84-8	mg/kg	100	<1500	<100	
Conclusion					Pass	

9. Organotin Content Requirement in Annex XVII, Item 20 of the REACH Regulation(EC) No 1907/2006 with its Amendments

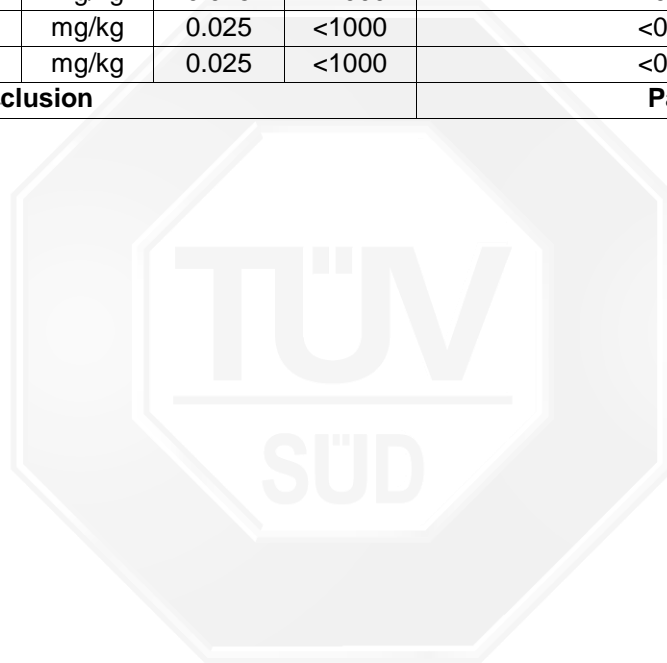
Test with reference to ISO 17353:2004, determination by GC-MS.

Compounds	Unit	MDL	Limit	Results		
				005	006+007+008	009+011+012
DBT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
TBT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
DOT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
TcyT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
TPhT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
Conclusion				Pass	Pass	Pass



Compounds	Unit	MDL	Limit	Results		
				010	013	014+015+016
DBT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
TBT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
DOT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
TcyT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
TPhT	mg/kg	0.025	<1000	<0.025	<0.025	<0.025
Conclusion				Pass	Pass	Pass

Compounds	Unit	MDL	Limit	Results
				017+018
DBT	mg/kg	0.025	<1000	<0.025
TBT	mg/kg	0.025	<1000	<0.025
DOT	mg/kg	0.025	<1000	<0.025
TcyT	mg/kg	0.025	<1000	<0.025
TPhT	mg/kg	0.025	<1000	<0.025
Conclusion				Pass



10. Screening of 224 Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) based on Regulation (EC) No.1907/2006 (REACH)

Screening of 1 Substances of Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) based on Regulation (EC) No 1907/2006 concerning the REACH.

Test with reference to in house method, determination by ICP, UV-VIS, GC-MS and LC-MS.

Item No.	Tested Items	CAS No.	MDL [% w/w]	Concentration [% w/w]	Classification
				005+006+007+008+009+010+011+012	
-	All tested SVHC in candidate list	-	0.01	<0.01	-
	Resorcinol	108-46-3	0.010	ND	Endocrine disrupting properties (Article 57(f) - human health)

Item No.	Tested Items	CAS No.	MDL [% w/w]	Concentration [% w/w]	Classification
				013+014+015+016+017+018	
-	All tested SVHC in candidate list	-	0.01	<0.01	-
	Resorcinol	108-46-3	0.010	ND	Endocrine disrupting properties (Article 57(f) - human health)

Remark:

- The table above only shows detected SVHC, and SVHC that below MDL are not reported. Please refer to Appendix for the full list of tested SVHC.
- ** The substances are tested in terms of its respective elements and the test result is based on the calculation of selected elements/marker(s) and to the worst-case scenario. Calculated concentration of boric and arsenic compounds are based on the water extractive boron and arsenic. 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.
- ## The substances are UVCB(substance of unknown or variable composition, complex reaction products or biological materials), which are identified by its main constituents. Individual concentrations to the constituent of UVCB with an amount of <0.01% were not considered by the calculation of the sum. Calculation is based on the worst-case scenario. Due to the UVCB nature the reported values may be regarded as semi-quantitative.
- # only applicable with $\geq 0.1\%$ of Michler's ketone (CAS No. 90-94-8) or Michler's base (CAS No. 101-61-1)
- TGIC is a mixture and also contains β -TGIC. According to ECHA's technical dossier the ratio of β -TGIC to TGIC is around 1 to 10. Therefore β -TGIC is issued based on the above-mentioned ratio.
- The analysis of **224** SVHC and **1** public consultation list are done by currently available test & screening techniques against the SVHC candidate list published by European Chemical Agency (ECHA). Refer to http://echa.europa.eu/chem_data/candidate_list_table_en.asp for details.
- In accordance with Regulation(EC) No 1907/2006, any producer or importer of substances, preparations and articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1), if both the following conditions are met:
 - The substance is present in those articles in quantities totalling over 1 tonne per producer or importer per year;
 - The substance is present in those articles above a concentration of 0.1% weight by weight (w/w).

8. From 28 October 2008, EU & EEA suppliers whose goods contain substances on the Candidate List in a concentration above 0.1%(w/w) must provide sufficient information to their customers and on request to a consumer within 45 days of the receipt of this request. This information must ensure safe use of the article and, as a minimum, include the name of the substance.

Appendix

Item No.	Tested Items	CAS No.	Classification
1	Benzyl butyl phthalate (BBP)	85-68-7	Toxic for reproduction (article 57 c)
2	Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	Toxic for reproduction (article 57 c)
3	Dibutyl phthalate (DBP)	84-74-2	Toxic for reproduction (article 57 c)
4	4,4'-Diaminodiphenylmethane (MDA)	101-77-9	Carcinogenic (article 57 a)
5	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	vPvB (article 57 e)
6	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	PBT and vPvB (articles 57 d and 57 e)
7	Cobalt Dichloride**	7646-79-9	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
8	Hexabromocyclododecane (HBCDD)	25637-99-4/ 3194-55-6	PBT (article 57 d)
9	Sodium dichromate, dihydrate**	7789-12-0/ 10588-01-9	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
10	Anthracene	120-12-7	PBT (article 57 d)
11	Lead hydrogen arsenate**	7784-40-9	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
12	Bis(tributyltin)oxide (TBTO)**	56-35-9	PBT (article 57 d)
13	Diarsenic pentaoxide**	1303-28-2	Carcinogenic (article 57 a)
14	Diarsenic trioxide**	1327-53-3	Carcinogenic (article 57 a)
15	Triethyl arsenate**	15606-95-8	Carcinogenic (article 57 a)
16	2,4-Dinitrotoluene	121-14-2	Carcinogenic (article 57 a)
17	Anthracene oil ^{##}	90640-80-5	Carcinogenic, PBT and vPvB (articles 57 a, 57 d and 57 e)
18	Anthracene oil, anthracene paste, distn, lights ^{##}	91995-17-4	Carcinogenic, mutagenic, PBT and vPvB (articles 57 a, 57 b, 57 d and 57 e)
19	Anthracene oil, anthracene paste, anthracene fraction ^{##}	91995-15-2	Carcinogenic, mutagenic, PBT and vPvB (articles 57 a, 57 b, 57 d and 57 e)
20	Anthracene oil, anthracene-low ^{##}	90640-82-7	Carcinogenic, mutagenic, PBT and vPvB (articles 57 a, 57 b, 57 d and 57 e)
21	Anthracene oil, anthracene paste ^{##}	90640-81-6	Carcinogenic, mutagenic, PBT and vPvB (articles 57 a, 57 b, 57d and 57 e)
22	Lead chromate**	7758-97-6	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
23	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)**	12656-85-8	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
24	Lead sulfochromate yellow (C.I. Pigment Yellow 34)**	1344-37-2	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)

25	Diisobutyl phthalate (DIBP)	84-69-5	Toxic for reproduction (article 57c)
26	Tris(2-chloroethyl)phosphate	115-96-8	Toxic for reproduction (article 57c)
27	Pitch, coal tar, high temp. ##	65996-93-2	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)
28	Acrylamide	79-06-1	Carcinogenic and mutagenic (articles 57 a and 57 b)
29	Trichloroethylene	79-01-6	Carcinogenic (article 57 a)
30	Boric acid**	10043-35-3/ 11113-50-1	Toxic for reproduction (article 57 c)
31	Disodium tetraborate, anhydrous**	1330-43-4/ 12179-04-3	Toxic for reproduction (article 57 c)
32	Tetraboron disodium heptaoxide, hydrate (calculate as decahydrate)**	12267-73-1	Toxic for reproduction (article 57 c)
33	Sodium chromate**	7775-11-3	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
34	Potassium chromate**	7789-00-6	Carcinogenic and mutagenic (articles 57 a and 57 b)
35	Ammonium dichromate**	7789-09-5	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
36	Potassium dichromate**	7778-50-9	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
37	Cobalt(II) sulphate**	10124-43-3	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
38	Cobalt(II) dinitrate**	10141-05-6	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
39	Cobalt(II) carbonate**	513-79-1	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
40	Cobalt(II) diacetate **	71-48-7	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
41	2-Methoxyethanol	109-86-4	Toxic for reproduction (article 57c)
42	2-Ethoxyethanol	110-80-5	Toxic for reproduction (article 57c)
43	Chromium trioxide**	1333-82-0	Carcinogenic and mutagenic (articles 57 a and 57 b)
44	Acids generated from chromium trioxide and their oligomers: a. Chromic acid** b. Dichromic acid ** c. Oligomers of chromic acid and dichromic acid **	7738-94-5/ 13530-68-2	Carcinogenic (article 57a)
45	2-Ethoxyethyl acetate (2-EEA)	111-15-9	Toxic for reproduction (article 57c)
46	Strontium chromate**	7789-06-2	Carcinogenic (article 57a)
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNU)	68515-42-4	Toxic for reproduction (article 57c)
48	Hydrazine	7803-57-8 302-01-2	Carcinogenic (article 57a)
49	1-Methyl-2-pyrrolidone	872-50-4	Toxic for reproduction (article 57c)



50	1,2,3-Trichloropropane	96-18-4	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
51	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	Toxic for reproduction (article 57c)
52	1, 2-Dichloroethane	107-06-2	Carcinogenic (article 57 a)
53	2,2'-Dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	Carcinogenic (article 57 a)
54	2-Methoxyaniline, o-Anisidine	90-04-0	Carcinogenic (article 57 a)
55	4-tert-Octylphenol	140-66-9	Equivalent level of concern having probable serious effects to the environment (article 57 f)
56	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008, and 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 (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight **	-	Carcinogenic (article 57a)
57	Arsenic acid **	7778-39-4	Carcinogenic (article 57 a)
58	Bis(2-methoxyethyl) ether	111-96-6	Toxic for reproduction (article 57 c)
59	Bis(2-methoxyethyl) phthalate	117-82-8	Toxic for reproduction (article 57 c)
60	Calcium arsenate**	7778-44-1	Carcinogenic (article 57 a)
61	Dichromium tris(chromate) **	24613-89-6	Carcinogenic (article 57 a)
62	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	Carcinogenic (article 57 a)
63	Lead diazide**	13424-46-9	Toxic for reproduction (article 57 c)
64	Lead dipicrate**	6477-64-1	Toxic for reproduction (article 57 c)
65	Lead styphnate **	15245-44-0	Toxic for reproduction (article 57 c)
66	N,N-dimethylacetamide (DMAC)	127-19-5	Toxic for reproduction (article 57 c)
67	Pentazinc chromate octahydroxide**	49663-84-5	Carcinogenic (article 57 a)
68	Phenolphthalein	77-09-8	Carcinogenic (article 57 a)
69	Potassium hydroxyoctaoxodizincatedichromate**	11103-86-9	Carcinogenic (article 57 a)
70	Trilead diarsenate**	3687-31-8	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
71	Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 , and 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 (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight **	-	Carcinogenic (article 57 a)
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	Toxic for reproduction (Article 57 c)

73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	Toxic for reproduction (Article 57 c)
74	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol #	561-41-1	Carcinogenic (Article 57a)
75	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	Carcinogenic (Article 57 a)
76	4-[4,4'-bis(dimethylamino)benzhydrylidene] cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride(C.I. Basic Violet 3)#	548-62-9	Carcinogenic (Article 57a)
77	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) #	2580-56-5	Carcinogenic (Article 57a)
78	Diboron trioxide	1303-86-2	Toxic for reproduction (Article 57 c)
79	Lead(II) bis(methanesulfonate)**	17570-76-2	Toxic for reproduction (Article 57 c)
80	Formamide	75-12-7	Toxic for reproduction (Article 57 c)
81	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	Carcinogenic (Article 57a)
82	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	Mutagenic (Article 57b)
83	α,α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)#	6786-83-0	Carcinogenic (Article 57a)
84	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	Mutagenic (Article 57b)
85	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	PBT (Article 57 d); vPvB (Article 57 e)
86	Pentacosafuorotridecanoic acid	72629-94-8	PBT (Article 57 d); vPvB (Article 57 e)
87	Tricosafuorododecanoic acid	307-55-1	vPvB (Article 57 e)
88	Henicosafuoroundecanoic acid	2058-94-8	vPvB (Article 57 e)
89	Heptacosafuorotetradecanoic acid	376-06-7	vPvB (Article 57 e)
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated-covering well-defined substances and UVCB substances, polymers and homologue	-	Equivalent level of concern – probable serious effects on the environment (Article 57 f)
91	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	-	Equivalent level of concern – probable serious effects on the environment (Article 57 f)
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	Equivalent level of concern – probable serious effects on human health (Article 57 f)
93	Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA)	85-42-7	Equivalent level of concern – probable serious effects on human health (Article 57 f)
94	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0 19438-60-9 48122-14-1 57110-29-9	Equivalent level of concern – probable serious effects on human health (Article 57 f)
95	Methoxy acetic acid	625-45-6	Toxic for reproduction (Article 57 c); equivalent level of concern - probable serious effects on human health and the environment (Article 57 f)
96	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	Toxic for reproduction (Article 57 c)
97	Diisopentylphthalate (DIPP)	605-50-5	Toxic for reproduction (Article 57 c)

98	N-pentyl-isopentylphthalate	-	Toxic for reproduction (Article 57 c)
99	1,2-Diethoxyethane	629-14-1	Toxic for reproduction (Article 57 c)
100	N,N-dimethylformamide	68-12-2	Toxic for reproduction (Article 57 c)
101	Dibutyltin dichloride (DBT)	683-18-1	Toxic for reproduction (Article 57 c)
102	Acetic acid, lead salt, basic**	51404-69-4	Toxic for reproduction (Article 57 c)
103	Basic lead carbonate (trilead bis(carbonate)dihydroxide)**	1319-46-6	Toxic for reproduction (Article 57 c)
104	Lead oxide sulfate (basic lead sulfate)**	12036-76-9	Toxic for reproduction (Article 57 c)
105	[Phthalato(2-)]dioxotrilead (dibasic lead phthalate)**	69011-06-9	Toxic for reproduction (Article 57 c)
106	Dioxobis(stearato)trilead**	12578-12-0	Toxic for reproduction (Article 57 c)
107	Fatty acids, C16-18, lead salts**	91031-62-8	Toxic for reproduction (Article 57 c)
108	Lead bis(tetrafluoroborate)**	13814-96-5	Toxic for reproduction (Article 57 c)
109	Lead cyanamate**	20837-86-9	Toxic for reproduction (Article 57 c)
110	Lead dinitrate**	10099-74-8	Toxic for reproduction (Article 57 c)
111	Lead oxide (lead monoxide)**	1317-36-8	Toxic for reproduction (Article 57 c)
112	Lead tetroxide (orange lead)**	1314-41-6	Toxic for reproduction (Article 57 c)
113	Lead titanium trioxide**	12060-00-3	Toxic for reproduction (Article 57 c)
114	Lead Titanium Zirconium Oxide**	12626-81-2	Toxic for reproduction (Article 57 c)
115	Pentalead tetraoxide sulphate**	12065-90-6	Toxic for reproduction (Article 57 c)
116	Pyrochlore,antimony lead yellow**	8012-00-8	Toxic for reproduction (Article 57 c)
117	Silicic acid, barium salt, lead-doped**	68784-75-8	Toxic for reproduction (Article 57 c)
118	Silicic acid, lead salt**	11120-22-2	Toxic for reproduction (Article 57 c)
119	Sulfurous acid, lead salt, dibasic**	62229-08-7	Toxic for reproduction (Article 57 c)
120	Tetraethyllead**	78-00-2	Toxic for reproduction (Article 57 c)
121	Tetralead trioxide sulphate**	12202-17-4	Toxic for reproduction (Article 57 c)
122	Trilead dioxide phosphonate**	12141-20-7	Toxic for reproduction (Article 57 c)
123	Furan	110-00-9	Carcinogenic (Article 57a)
124	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	Carcinogenic (Article 57 a); Mutagenic (Article 57 b)
125	Diethyl sulphate	64-67-5	Carcinogenic (Article 57 a); Mutagenic (Article 57 b)
126	Dimethyl sulphate	77-78-1	Carcinogenic (Article 57 a)
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	Toxic for reproduction (Article 57 c)
128	Dinoseb	88-85-7	Toxic for reproduction (Article 57 c)
129	4,4'-methylenedi-o-toluidine	838-88-0	Carcinogenic (Article 57 a)
130	4,4'-oxydianiline and its salts	101-80-4	Carcinogenic (Article 57 a); Mutagenic (Article 57 b)
131	4-Aminoazobenzene	60-09-3	Carcinogenic (Article 57 a)
132	4-methyl-m-phenylenediamine	95-80-7	Carcinogenic (Article 57 a)
133	6-methoxy-m-toluidine	120-71-8	Carcinogenic (Article 57 a)
134	Biphenyl-4-ylamine	92-67-1	Carcinogenic (Article 57 a)
135	o-aminoazotoluene	97-56-3	Carcinogenic (Article 57 a)
136	o-Toluidine	95-53-4	Carcinogenic (Article 57 a)
137	N-methylacetamide	79-16-3	Toxic for reproduction (Article 57 c)
138	1-bromopropane; n-propyl bromide	106-94-5	Toxic for reproduction (Article 57 c)
139	Cadmium**	7440-43-9	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
140	Cadmium oxide**	1306-19-0	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
141	Dipentyl phthalate (DPP)	131-18-0	Toxic for reproduction (Article 57 c)

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]	-	Equivalent level of concern having probable serious effects to the environment (due to the endocrine disrupting properties of the degradation products) (Article 57 f)
143	Ammonium pentadecafluorooctanoate	3825-26-1	Toxic for reproduction (Article 57 c); PBT (Article 57 d)
144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	Toxic for reproduction (Article 57 c); PBT (Article 57 d)
145	Cadmium sulphide**	1306-23-6	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
146	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate)(C.I.Direct Red 28)	573-58-0	Carcinogenic (Article 57a)
147	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	Carcinogenic (Article 57a)
148	Dihexyl phthalate	84-75-3	Toxic for reproduction (Article 57 c)
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	Toxic for reproduction (Article 57 c)
150	Lead di(acetate) **	301-04-2	Toxic for reproduction (Article 57 c)
151	Trixylyl phosphate	25155-23-1	Toxic for reproduction (Article 57 c)
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	Toxic for reproduction (Article 57 c)
153	Cadmium chloride**	10108-64-2	Carcinogenic (Article 57a); Mutagenic (Article 57(b)); Toxic for Reproduction (Article 57(c)); Equivalent level of concern having probable serious effects to human health (Article 57 f)
154	Sodium perborate; perboric acid, sodium salt	-	Toxic for reproduction (Article 57 c)
155	Sodium peroxometaborate	7632-04-4	Toxic for reproduction (Article 57 c)
156	Cadmium fluoride**	7790-79-6	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
157	Cadmium sulphate**	10124-36-4; 31119-53-6	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	PBT (Article 57 d); vPvB (Article 57 e)
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	PBT (Article 57 d); vPvB (Article 57 e)
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	Toxic for reproduction (Article 57 c)

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)	-	Toxic for reproduction (Article 57 c)
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)	Toxic for reproduction (Article 57 c)
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]	-	vPvB (Article 57 e)
164	1,3-propanesultone	1120-71-4	Carcinogenic (Article 57 a)
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	vPvB (Article 57 e)
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	vPvB (Article 57 e)
167	Nitrobenzene	98-95-3	Toxic for reproduction (Article 57 c)
168	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluorononanoic acid and its sodium and ammonium salts)	375-95-1; 21049-39-8; 4149-60-4	Toxic for reproduction (Article 57 c);PBT (Article 57 d)
169	Benzo[a]pyrene	50-32-8	Carcinogenic (Article 57a) Mutagenic (Article 57b) Toxic for reproduction (Article 57c) PBT (Article 57d) vPvB (Article 57e)
170	4,4'-isopropylidenediphenol (Bisphenol A, BPA)	80-05-7	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - environment) Endocrine disrupting properties (Article 57(f) - human health)
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2, 3830-45-3, 3108-42-7	Toxic for reproduction (Article 57 c); PBT (Article 57 d)
172	p-(1,1-dimethylpropyl)phenol (pentyphenol, PTAP)	80-46-6	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
173	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]	-	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
174	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	355-46-4	vPvB (Article 57e)
175	Benz[a]anthracene	56-55-3	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
176	Cadmium carbonate**	513-78-0	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)

177	Cadmium hydroxide**	21041-95-2	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)
178	Cadmium nitrate**	10325-94-7	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)
179	Chrysene	218-01-9	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
180	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo [12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	vPvB (Article 57e)
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]	-	Endocrine disrupting properties (Article 57(f) - environment)
182	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride (trimellitic anhydride) (TMA)	552-30-7	Respiratory sensitising properties (Article 57(f)) – human health
183	Dicyclohexyl phthalate (DCHP)	84-61-7	Toxic for reproduction (Article 57(c)); endocrine disrupting properties (Article 57(f) - human health)
184	Octamethylcyclotetrasiloxane (D4)	556-67-2	PBT (Article 57d) vPvB (Article 57e)
185	Decamethylcyclopentasiloxane (D5)	541-02-6	PBT (Article 57d) vPvB (Article 57e)
186	Dodecamethylcyclohexasiloxane (D6)	540-97-6	PBT (Article 57d) vPvB (Article 57e)
187	Lead**	7439-92-1	Toxic for reproduction (Article 57c)
188	Disodium octaborate**	12008-41-2	Toxic for reproduction (Article 57c)
189	Benzo[ghi]perylene	191-24-2	PBT (Article 57d) vPvB (Article 57e)
190	Terphenyl hydrogenated	61788-32-7	vPvB (Article 57e)
191	Ethylenediamine (EDA)	107-15-3	Respiratory sensitising properties (Article 57(f) - human health)
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	Toxic for reproduction (Article 57c)
193	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor)	15087-24-8	Endocrine disrupting properties (Article 57(f) - environment)
194	Benzo[k]fluoranthene	207-08-9	Carcinogenic (Article 57a); PBT (Article 57d); vPvB (Article 57e)
195	Fluoranthene	206-44-0	PBT (Article 57d); vPvB (Article 57e)
196	Phenanthrene	85-01-8	vPvB (Article 57e)
197	Pyrene	129-00-0	PBT (Article 57d); vPvB (Article 57e)

198	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment) Equivalent level of concern having probable serious effects to human health (Article 57(f) – human health)
199	2-methoxyethyl acetate	110-49-6	Toxic for reproduction (Article 57 (c))
200	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	Endocrine disrupting properties (Article 57(f) – environment)
201	4-tert-butylphenol (PTBP)	98-54-4	Endocrine disrupting properties (Article 57(f) – environment)
202	Diisohexyl phthalate	71850-09-4	Toxic for reproduction (Article 57c)
203	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	Toxic for reproduction (Article 57c)
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Toxic for reproduction (Article 57c)
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	Equivalent level of concern having probable serious effects on the environment (Article 57f) Equivalent level of concern having probable serious effects on human health (Article 57f)
206	1-vinylimidazole	1072-63-5	Toxic for reproduction (Article 57c)
207	2-methylimidazole	693-98-1	Toxic for reproduction (Article 57c)
208	Butyl 4-hydroxybenzoate	94-26-8	Endocrine disrupting properties (Article 57(f) – human health)
209	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	Toxic for reproduction (Article 57c)
210	Bis(2-(2-methoxyethoxy)ethyl) ether	143-24-8	Toxic for reproduction (Article 57c)
211	Diocetyl tin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	-	Toxic for reproduction (Article 57c)
212	1,4-dioxane	123-91-1	Carcinogenic (Article 57a) Equivalent level of concern having probable serious effects on the environment (Article 57f) Equivalent level of concern having probable serious effects on human health (Article 57f)
213	2,2-bis(bromomethyl)propane 1,3-diol (BMP), 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA), 2,3-dibromo-1-propanol (2,3-DBPA)	3296-90-0, 36483-57-5/ 1522-92-5, 96-13-9	Carcinogenic (Article 57a)
214	2-(4-tert-butylbenzyl) propionaldehyde and its individual stereoisomers	-	Toxic for reproduction (Article 57c)
215	4,4'-(1-methylpropylidene) bisphenol; (bisphenol B)	77-40-7	Endocrine disrupting properties (Article 57(f) - environment AND human health)
216	Glutaral	111-30-8	Respiratory sensitising properties (Article 57(f) - human health)

217	Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17]	-	PBT (Article 57d) vPvB (Article 57e)
218	Orthoboric acid, sodium salt	13840-56-7	Toxic for reproduction (Article 57c)
219	Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	-	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) – human health) Endocrine disrupting properties (Article 57(f) – environment)
220	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	-	Endocrine disrupting properties (Article 57(f) - human health)
221	Endocrine disrupting properties (Article 57(f) - human health)	119-47-1	Toxic for reproduction (Article 57c)
222	S-(tricyclo[5.2.1.0'2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8	PBT (Article 57 d)
223	Tris(2-methoxyethoxy)vinylsilane	1067-53-4	Toxic for reproduction (Article 57c)
224	N-(hydroxymethyl)acrylamide	924-42-5	Carcinogenic (Article 57a) Mutagenic (Article 57b)

Item No.	Tested Items	CAS No.	Classification
1	Resorcinol	108-46-3	Endocrine disrupting properties (Article 57(f) - human health)

- End of Test Report -