

Test Report

No.: 70.452.22.12992.01

Date: 2022-12-09

Applicant: POLYGROUP PACIFIC LTD
Address: UNIT 606, 6TH FLOOR, FAIRMONT HOUSE, 8 COTTON TREE DRIVE, CENTRAL, HONG KONG
Product Name/ Item No.: 8FT Summer Waves® Transparent Quick Set® Pool/ P10008304
Receipt Date of Sample: 2022-09-20, 2022-10-19
Date of Testing: 2022-09-20 to 2022-10-25
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 16927:2017 Mini-pools - Specific requirements including safety and test methods for mini-pools	Pass
2. Total Cadmium Content Requirement in Annex XVII, Item 23 of the REACH Regulation (EC) No 1907/2006 with its Amendments	Pass
3. Total Lead Content Requirement in Annex XVII, Item 63 of the REACH Regulation(EC) No 1907/2006 with its Amendments	Pass
4. Organotin Content Requirement in Annex XVII, Item 20 of the REACH Regulation(EC) No 1907/2006 with its Amendments	Pass
5. Polycyclic Aromatic Hydrocarbons (PAHs) Content in Annex XVII item 50 of the REACH Regulation (EC) No 1907/2006 with its Amendments	Pass
6. Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs) Content - European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs)	Pass
7. Phthalates content	Pass
8. 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 10 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
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Note:

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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	8FT Summer Waves® Transparent Quick Set® Pool (P10008304)	

Note: Electronic version of the instruction and packaging for pool was provided by the applicant for evaluation. Only English version was evaluated in this report.

T. No	Sample	Description
T1	002	White/transparent soft plastic with colorful printing (body)
T2	003	Transparent soft plastic (body)
T3	004	Light blue soft plastic (body)
T4	005	Black soft plastic (filling pipe)
T5	006	Black plastic (cap)
T6	007	Light grey soft plastic
T7	008	Light grey plastic (valve)
T8	009	Black soft plastic washer (in valve)
T9	010	Light grey soft plastic (valve)
T10	011	Transparent soft plastic (repair stick)

Test Results

1. EN 16927:2017 Mini-pools - Specific requirements including safety and test methods for mini-pools
(For sample 001)

Clause	Requirements	Result	Verdict
4	General requirements and test methods		
4.1	General		
	When installed according to the installation and maintenance manual and during use, the mini-pool shall meet the requirements of this document. When a membrane is used as a watertight system, it is not mandatory to have a minimum thickness, as long as the mini-pools structure passes the performance requirements specified in 4.2 to 4.5. All the tests are performed on the same sample.	Complied	P
4.2	Mini-pools with frame-supported walls and rigid walls		
4.2.1	Resistance to horizontal deformation		
	On completion of the test defined in 4.2.1.2, the mini-pool shall not collapse or suffer any permanent deformation affecting its structural integrity (e.g. creating sharp edges, visual breakings, etc.).	Self-stabilizing walls	NA
4.2.2	Resistance to vertical deformation		
	On completion of the test defined in 4.2.2.2, the mini-pool shall not collapse or suffer any permanent deformation affecting its structural integrity (e.g. creating sharp edges, visual breakings, etc.).	Self-stabilizing walls	NA
4.2.3	Bursting strength		
	The bursting strength test defined in 4.2.3.3 is performed after carrying out the resistance tests for horizontal deformation (4.2.1.2) and vertical deformation (4.2.2.2). On completion of the test defined in 4.2.3.3, the pool shall not burst and shall not suffer any permanent deformation affecting the product's resistance.	Self-stabilizing walls	NA
4.3	Mini-pools with self-stabilizing or inflatable walls		
4.3.1	Capacity to stop an overflow		
	On completion of the tests described in 4.3.1.2 and in 4.3.1.3, the mini-pool shall not collapse and lose its water retention capability. Mini-pool overflow — Install the mini-pool, according to the manufacturer's instructions, on a flat horizontal ground (maximum slope allowed is 5 mm/m); — Fill the mini-pool until it overflows with a flow rate of 2,5 m ³ /h minimum and allow it to overflow for 1 min. Behaviour test of the wall under load — Fill the mini-pool with water to the maximum filling level recommended by the manufacturer. — Place on the tube a 0,50 m long half pipe with a minimum inside diameter of 0,25 m ballasted with one 40 kg weight on each side. — Maintain the load for 3 s at the tube's maximum deflection, the weights being liable to touch the ground. — Lift the load up immediately after 3 s making sure that the loading device does not interfere during this operation <i>NOTE In the case of mini-pools fitted with a strut, this test is performed at the most unfavourable point.</i>	Complied	P
4.3.2	Inflatable compartments		
	All of the air inlets provided for inflation shall be fitted with caps permanently secured on an accessible part of each inflatable compartment of the mini-pool.	Complied	P

Clause	Requirements	Result	Verdict
	Once this part is inflated, the caps located inside the mini-pool shall be able to be pushed back inside the upper part so that they do not protrude from the surface by more than 5 mm. The caps of the inflation ports should not be able to become detached and should be protected against accidental removal. The valves shall be fitted in order to prevent an instantaneous deflation.		
4.3.3	Stability in the event of deflation of the upper tube of mini-pool with self-stabilizing walls		
	On completion of the test described in 4.3.3.2, the mini-pool with self-stabilizing walls shall not collapse.	Complied	P
4.3.4	Bursting strength		
	On completion of the test defined in 4.3.4.2, the mini-pool with self-stabilizing walls shall not burst and shall not present any permanent deformation affecting the product's resistance.	Complied	P
4.4	Tolerances		
	The indicated dimensions and measurements are given with a tolerance of $\pm 3\%$ (unless otherwise indicated). Mini-pools with self-stabilizing or inflatable walls commonly have larger acceptable tolerances.	Complied	P
4.5	Minimum performance requirements for structural materials		
4.5.1	General		
	The structural design and materials shall be in accordance with accepted structural engineering practices. Selection of materials for the construction of the mini-pool shall be conducted under consideration of external influences, including but not limited to temperature, UV, chemicals, etc., when appropriate, that may influence the structural integrity of the material. Any combination of different materials in direct contact with each other shall be compatible and not negatively affect each other's properties or structural integrity. The requirements of this section do not apply to non-structural elements of the mini-pool, including, but not limited to, elements with solely decorative function.	Declaration was provided	P
4.5.2	Specific requirements and testing for corrosion resistance		
4.5.2.1	Metal products		
	Subject a sample per type of metallic surface (other than aluminium) of the wall, before fitting, to a salt spray for 96 h in accordance with EN ISO 9227. At the end of the test, evaluate the results obtained by reference to the requirements of EN ISO 4628-3. The number of rust specks on the surface should conform to class RI 1 or lower.	No Metal	NA
4.5.2.2	Wood		
	Structural elements made of wood or wood-based material shall meet the following requirements according to EN 335: — use class 3 if they are not in direct contact with ground and / or fresh water — use class 4 if they are in direct contact with ground and / or fresh water Compatible woods may be chosen according to two distinct approaches: — using naturally durable woods (excluding sapwood) as defined in EN 350, that meet the requirements for use in applicable hazard classes in EN 460. — using wood with conferred durability (preservation treatments while conserving the sapwood), that meets the requirements for use in applicable hazard classes in EN 351-1.	No Wood	NA
4.6	Injury risks		
4.6.1	Small elements, edges and corners		

Clause	Requirements	Result	Verdict
	<p>When the mini-pool is being used, any protrusion on accessible parts liable to present a risk of injury shall be protected by a method which in order to be removed, requires the use of a tool or a minimum amount of force of 60 N, with an accuracy of 2 N.</p> <p>During the installation, equipment made of wood, fibreglass, or other materials shall be free of splinters.</p> <p>Small accessible and grippable elements shall not fully enter into the template or they shall be fixed to the item to which they belong such that they cannot be detached under a force of 60 N, with an accuracy of 2 N, applied in any direction whatsoever.</p> <p>All edges, protruding parts and corners accessible without use of tools or minimum amount of force of 60 N (± 2 N) shall be designed not to cause any injury. When necessary they shall be treated appropriately to remove this risk.</p>	Complied	P
4.6.2	Permissible openings		
4.6.2.1	Principle		
	<p>To prevent entrapment hazards inside the pool structure, accessible openings with the lowest point located beyond 500 mm below the maximum water level recommended by the manufacturer shall be restricted to the range of opening or gap size dimensions specified in 4.6.2.2 to 4.6.2.3, unless specifically permitted in other clauses/annexes of this standard and/or parts of this standard series.</p> <p>If the depth of penetration is less than 10mm, no requirements apply.</p>	See below	P
4.6.2.2	Finger and toe entrapment		
	<p>Where there is a risk of finger or toe entrapment, the permissible opening shall be ≤ 8 mm or ≥ 25 mm.</p>	Complied	P
4.6.2.3	Head and neck entrapment		
	<p>Where there is a risk of head or neck entrapment, the permissible opening shall be ≤ 110 mm or ≥ 230 mm.</p> <p>Where an opening is ≥ 230 mm it should not permit passage to further entrapment hazards.</p> <p>Where there is a combination of risks, the lesser of the permitted opening sizes shall be used.</p>	Complied	P
4.6.2.4	Other body entrapment		
	<p>Other permissible openings include the range between 25 mm and 110 mm.</p> <p>When such openings are necessary for the functionality of the mini-pool or its specific features, the manufacturer shall provide the proper safety instructions for safe operation of such feature and alert the consumer of potential risk of entrapment when applicable.</p>	Complied	P
4.7	Accessibility		
	<p>The mini-pools being lower than 850 mm wall height can be accessed relatively easily therefore constant adult supervision of children is imperative and the only reliable method of ensuring children safety.</p> <p>The risk of drowning is reasonably foreseeable and especially high for children under 5 years.</p> <p>Accordingly, it is necessary for the adult supervisor to keep the children under competent supervision at all times.</p> <p>Furthermore keep a telephone or a means of communication near the pool in order to be able to call the emergency services.</p> <p>Even when the pool is not in use, the following actions shall be considered:</p> <ul style="list-style-type: none"> — make the mini-pool inaccessible if possible (e.g. lock doors, windows and access paths to the mini-pool); and/or — install a protection device; and/or — empty the mini-pool. <p>If a specific means of access is used (e.g. ladder) such means of access shall comply with requirements for safe means of access specified in EN 16582-</p>	No specific means of access is used and adult supervisor was recommended.	P

Clause	Requirements	Result	Verdict
	1:2015, 5.4.4.		
5	Instructions for the consumer		
5.1	General principles		
	All documents shall contain:		
	the following statement: "Please read carefully and keep for future reference";	Complied	P
	the information to identify the model of the basin, mini-pool to which the document relates;	Complied	P
	the name and contact information of the person responsible for placing the product on the market (manufacturer, distributor or importer).	Complied	P
	All instructions shall be legible, clear, comprehensible to the buyer and written in official national languages where the product is sold.	Complied	P
	For better comprehension, the use of illustrations is recommended.	Complied	P
	When the instructions contain several pages, the manuals shall have numbered pages.	Complied	P
	The cautions and warnings shall be highlighted.	Complied	P
	Illustrations, if any, shall be placed such that they can be seen while the text referring to them is being read.	Complied	P
	The visuals shall not contradict the requirements included in this document. Where it is not specified in other rules and/or it does not conflict with existing regulations, the manufacturer's instructions need to be considered.	Complied	P
5.2	Point-of-purchase information		
	To allow the buyer to make a choice, the point-of-purchase information shall indicate the following at least:		
	the reference to this document and its following parts if applicable;	Complied	P
	the commercial name or reference;	Complied	P
	the maximum total overall dimension;	Complied	P
	the maximum volume of water as specified by the manufacturer	Complied	P
	in case of mini-pools with rigid walls, the obligation not to install the mini-pool in the ground;	-	NA
	safety information and/or pictograms related to the following: <ul style="list-style-type: none"> - awareness of the risk of drowning in the mini-pool; - adult supervision of children. 	Complied	P
5.3	Installation and maintenance information		
	Mini-pools shall be accompanied by information necessary or applicable for correct set up and proper use and maintenance, such as but not limited to:		
	selection of appropriate location to prevent the hazard of drowning of young children, install the mini-pool in a place where it is possible for the supervision to be constant;	Complied	P
	the list of all of the parts and the description of the installation phases in chronological order;	Complied	P
	the list of the tools required for the installation and of the materials complementary to the installation of the mini-pool as well as its use;	-	NA
	the address or telephone number or email address where the consumer can obtain additional information during the installation of the mini-pool, in the event of problems;	Complied	P
	the safety instructions	Complied	P
	recommendations concerning the filling level;	Complied	P
	if applicable, recommendations concerning the inflation level;	Complied	P
	if appropriate, recommendations concerning the need to monitor bolts and screws; splinters or any sharp edges;	Complied	P
	recommendations on winterizing and long-term storage;	Complied	P
	instructions for regular water replacement to maintain water hygiene.	Complied	P
5.4	On-product warnings		
	All mini-pools shall carry the following warnings:	Complied	P

Clause	Requirements	Result	Verdict
	<ul style="list-style-type: none"> - the safety sign in Figure 11 and/or the following text: " Keep children under supervision in the aquatic environment ", and - the safety sign in Figure 12 and/or the following text: "No diving" <div style="text-align: center;">  <p>Figure 11 — safety sign – ISO 20712-1 – WSM002, Keep children under supervision in the aquatic environment</p>  <p>Figure 12 — Safety sign ISO 20712-1 - WSP005, No diving</p> </div>		

Abbreviation:

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



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

Test with reference to EN 1122:2001 Method B, determination by ICP-OES

Sample	Unit	MDL	Limit	Result(s)	Conclusion
002	mg/kg	10.0	100	<10.0	Pass
003+004	mg/kg	10.0	100	<10.0	Pass
005+007+009	mg/kg	10.0	100	<10.0	Pass
006+008	mg/kg	10.0	100	<10.0	Pass
010+011	mg/kg	10.0	100	<10.0	Pass

3. Total Lead Content Requirement in Annex XVII, Item 63 of the REACH Regulation(EC) No 1907/2006 with its Amendments

Test with reference to in house method, determination by ICP-OES/ICP-MS.

Sample	Unit	MDL	Limit	Result(s)	Conclusion
002	mg/kg	10.0	500	<10.0	Pass
003+004	mg/kg	10.0	500	<10.0	Pass
005+007+009	mg/kg	10.0	500	<10.0	Pass
006+008	mg/kg	10.0	500	<10.0	Pass
010+011	mg/kg	10.0	500	<10.0	Pass

4. 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.

Parameter	Unit	MDL	Limit	Result(s)	
				002	003+004
DBT	mg/kg	0.025	1000	<0.025	<0.025
TBT	mg/kg	0.025	1000	<0.025	<0.025
DOT	mg/kg	0.025	1000	<0.025	<0.025
TcyT	mg/kg	0.025	1000	<0.025	<0.025
TPhT	mg/kg	0.025	1000	<0.025	<0.025
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)	
				005+007+009	006+008
DBT	mg/kg	0.025	1000	<0.025	<0.025
TBT	mg/kg	0.025	1000	<0.025	<0.025
DOT	mg/kg	0.025	1000	<0.025	<0.025
TcyT	mg/kg	0.025	1000	<0.025	<0.025
TPhT	mg/kg	0.025	1000	<0.025	<0.025
Conclusion				Pass	Pass

Parameter	Unit	MDL	Limit	Result(s)
				010+011
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

5. 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 2019:01PAK, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					002	003+004
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	0.5	<0.1	<0.1
Chrysene (CHR)	218-01-9	mg/kg	0.1	0.5	<0.1	<0.1
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	0.5	<0.1	<0.1
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005+007+009	006+008
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	0.5	<0.1	<0.1
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	0.5	<0.1	<0.1
Chrysene (CHR)	218-01-9	mg/kg	0.1	0.5	<0.1	<0.1
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	0.5	<0.1	<0.1
Conclusion					Pass	Pass

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

6. 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.

Compound	CAS No.	Unit	MDL	Limit	Result(s)	
					002	003+004
SCCP	85535-84-8	mg/kg	100	1500	<100	<100
Conclusion					Pass	Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s)	
					005+007+009	006+008
SCCP	85535-84-8	mg/kg	100	1500	<100	<100
Conclusion					Pass	Pass

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

7. Phthalates content

Test with reference to EN ISO 14389:2014, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					002	003+004
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	<0.1	ND	ND
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	<0.1	ND	ND
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	<0.1	ND	ND
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	<0.1	ND	ND
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	<0.1	ND	ND
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	<0.1	ND	ND
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
Di-n-hexyl phthalate (DHP)	84-75-3	%	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
1,2-Benzenedicarboxylicacid, di-C6-8-branched alkyl esters,C7-rich (DIHP)	71888-89-6	%	0.005	<0.1	ND	ND
Bis(2-methoxyethyl)phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisopentyl phthalate (DiPP)	605-50-5	%	0.005	<0.1	ND	ND
n-Pentyl-isopentylphthalate (nPiPP)	776297-69-9	%	0.005	<0.1	ND	ND
Diamyl phthalate/Dipentyl phthalate (DAP/DPP)	131-18-0	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid,dipentylester branched and linear (DPP)	84777-06-0	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	%	0.005	<0.1	ND	ND
Dicyclohexyl phthalate (DCHP)(84-61-7)	84-61-7	%	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
Di-iso-hexyl phthalate,DiHxP	71850-09-4	%	0.005	<0.1	ND	ND
Conclusion					Pass	Pass

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					005+007+009	006+008
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	<0.1	ND	ND
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	<0.1	ND	ND
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	<0.1	ND	ND
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	<0.1	ND	ND
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	<0.1	ND	ND
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	<0.1	ND	ND
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
Di-n-hexyl phthalate (DHP)	84-75-3	%	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
1,2-Benzenedicarboxylicacid, di-C6-8-branched alkyl esters,C7-rich (DIHP)	71888-89-6	%	0.005	<0.1	ND	ND
Bis(2-methoxyethyl)phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisopentyl phthalate (DiPP)	605-50-5	%	0.005	<0.1	ND	ND
n-Pentyl-isopentylphthalate (nPiPP)	776297-69-9	%	0.005	<0.1	ND	ND
Diamyl phthalate/Dipentyl phthalate (DAP/DPP)	131-18-0	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid,dipentylester branched and linear (DPP)	84777-06-0	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	%	0.005	<0.1	ND	ND
Dicyclohexyl phthalate (DCHP)(84-61-7)	84-61-7	%	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
Di-iso-hexyl phthalate,DiHxP	71850-09-4	%	0.005	<0.1	ND	ND
Conclusion					Pass	Pass

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

Remark: Limit was according to client's requirement

8. 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 10 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 (%)	Concentration (%)	Classification
				002+003+004	
-	All tested SVHC in candidate list	-	0.010	ND	-
1	Resorcinol	108-46-3	0.010	ND	Endocrine disrupting properties (Article 57(f) - human health)
2	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene] (BTBPE)	37853-59-1	0.010	ND	vPvB (Article 57e)
3	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol (TBBPA)	79-94-7	0.010	ND	Carcinogenic (Article 57a)
4	4,4'-sulphonyldiphenol (BPS)	80-09-1	0.010	ND	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) – environment); Endocrine disrupting properties (Article 57(f) – human health)
5	Barium diboron tetraoxide	13701-59-2	0.010	ND	Toxic for reproduction (Article 57c)
6	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof (TBPH)	-	0.010	ND	vPvB (Article 57e)
7	Isobutyl 4-hydroxybenzoate	4247-02-3	0.010	ND	Endocrine disrupting properties (Article 57(f) – human health)
8	Melamine	108-78-1	0.010	ND	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)
9	Perfluoroheptanoic acid (PFHpA) and its salts	-	0.010	ND	Toxic for reproduction (Article 57c); PBT (Article 57d); vPvB (Article 57e); Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)

Item No.	Tested Items	CAS No.	MDL (%)	Concentration (%)	Classification
				002+003+004	
10	Reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	-	0.010	ND	vPvB (Article 57e)

Item No.	Tested Items	CAS No.	MDL (%)	Concentration (%)	Classification
				005+006+007+008+009+010+011	
-	All tested SVHC in candidate list	-	0.010	ND	-
1	Resorcinol	108-46-3	0.010	ND	Endocrine disrupting properties (Article 57(f) - human health)
2	1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene] (BTBPE)	37853-59-1	0.010	ND	vPvB (Article 57e)
3	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol (TBBPA)	79-94-7	0.010	ND	Carcinogenic (Article 57a)
4	4,4'-sulphonyldiphenol (BPS)	80-09-1	0.010	ND	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) – environment); Endocrine disrupting properties (Article 57(f) – human health)
5	Barium diboron tetraoxide	13701-59-2	0.010	ND	Toxic for reproduction (Article 57c)
6	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof (TBPH)	-	0.010	ND	vPvB (Article 57e)
7	Isobutyl 4-hydroxybenzoate	4247-02-3	0.010	ND	Endocrine disrupting properties (Article 57(f) – human health)
8	Melamine	108-78-1	0.010	ND	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)

Item No.	Tested Items	CAS No.	MDL (%)	Concentration (%)	Classification
				005+006+007+008+009+010+011	
9	Perfluoroheptanoic acid (PFHpA) and its salts	-	0.010	ND	Toxic for reproduction (Article 57c); PBT (Article 57d); vPvB (Article 57e); Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)
10	Reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	-	0.010	ND	vPvB (Article 57e)

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 **10** 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).
- 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 I

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)

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Item No.	Tested Items	CAS No.	Classification
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)

Item No.	Tested Items	CAS No.	Classification
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)

Item No.	Tested Items	CAS No.	Classification
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)

Item No.	Tested Items	CAS No.	Classification
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)

Item No.	Tested Items	CAS No.	Classification
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)

Item No.	Tested Items	CAS No.	Classification
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-heptafluorononanoic 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)

Item No.	Tested Items	CAS No.	Classification
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)

Item No.	Tested Items	CAS No.	Classification
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	Dioctyltin 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)

Item No.	Tested Items	CAS No.	Classification
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)
2	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene] (BTBPE)	37853-59-1	vPvB (Article 57e)
3	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol (TBBPA)	79-94-7	Carcinogenic (Article 57a)
4	4,4'-sulphonyldiphenol (BPS)	80-09-1	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) – environment); Endocrine disrupting properties (Article 57(f) – human health)
5	Barium diboron tetraoxide	13701-59-2	Toxic for reproduction (Article 57c)
6	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof (TBPH)	-	vPvB (Article 57e)
7	Isobutyl 4-hydroxybenzoate	4247-02-3	Endocrine disrupting properties (Article 57(f) – human health)

8	Melamine	108-78-1	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)
9	Perfluoroheptanoic acid (PFHpA) and its salts	-	Toxic for reproduction (Article 57c); PBT (Article 57d); vPvB (Article 57e); Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)
10	Reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	-	vPvB (Article 57e)

- End of Test Report -

