Test Report No.: 70.452.20.13525.02

Date: 2021-09-01

Greater China

Applicant:	POLYGROUP TRADING LIMITED
Address:	UNIT 606,6TH FLOOR, FAIRMONT HOUSE NO.8 COTTON TREE DRIVE CENTRAL, HONG KONG
Product Name/ Item No.:	12FT Summer Waves® Active Frame Pool/P2001230* 3.66x91cm Summer Waves® Active Frame Pool/P2001236* 12FT Summer Waves® Active Frame Pool/P2001236* 12'x48" Metal Frame Pool/P2001248* 12FT Summer Waves® Active Frame Pool/P2001248* 12'x52" Metal Frame Pool Set/P2001252* 15FT Summer Waves® Active Frame Pool/P2001533* 15FT Summer Waves® Active Frame Pool/P2001536* 15FT Summer Waves® Active Frame Pool/P2001542* 15FT Summer Waves® Active Frame Pool/P2001548* 15'x52" Metal Frame Pool Set /P2001552* 15FT Summer Waves® Active Frame Pool/P2001848* (*= Refers to the composition of the swimming pool kit. It can be 0-9 or A-Z.)
Manufacturer:	POLYGROUP
Country of Origin:	China
Receipt Date of Sample:	2020-09-18; 2020-11-23,2021-08-23
Date of Testing:	2020-09-18 to 2020-12-16,2021-08-23 to 2021-09-01
Sample Submitted:	The sample(s) was (were) submitted by applicant and identified.
Test Result:	Refer to the data listed in following pages

	Test Specification:	**Conclusion:**
1.	**EN 16582-1:2015+A1:2021 Domestic swimming pools Part 1: General requirements including safety and test methods**	**Pass**
2.	**EN 16582-3:2015 Domestic swimming pools Part 3: Specific requirements including safety and test methods for aboveground pools**	**Pass**
3.	**Total Lead Content Requirement in Annex XVII, Item 63 of the REACH Regulation (EC) No 1907/2006 with its Amendments**	**Pass**
4.	**Total Cadmium Content Requirement in Annex XVII, Item 23 of the REACH Regulation(EC) No 1907/2006 with its Amendments**	**Pass**
5.	**Phthalates Content**	**Pass***
6.	**Polycyclic Aromatic Hydrocarbons (PAHs) Content in Annex XVII item 50 of the REACH Regulation(EC) No 1907/2006 with its Amendments**	**Pass**
7.	**Organotin Content Requirement in Annex XVII, Item 20 of the REACH Regulation(EC) No 1907/2006 with its Amendments**	**Pass**
8.	**Short Chain Chlorinated Paraffins (SCCPs) Content – in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)**	**Pass**

Remarks: 1. MDL = Method Detection Limit
2. ND = Not Detected (<MDL)
3. <= Less than
4. 1 mg/kg = 1 ppm = 0.0001%
5. *= Conclusion was drawn according to client's specification

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Note:

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(2) The results relate only to the Items tested.

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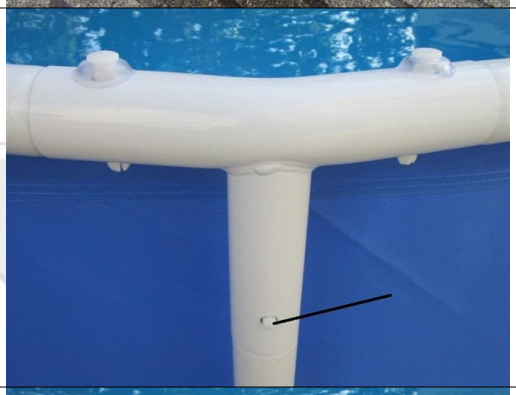
(4) Disclaimer Measurement Uncertainty:
Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according 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 Tested Subject:

Sample	Description	Photo
A	15FT Summer Waves® Active Frame Pool (P2001548*)	
001	Blue soft plastic with multi-color printed	
002	White coating	
003	Transparent soft plastic (repair patch)	

Sample	Description	Photo
004	Black plastic (base)	
005	White plastic (pole button)	
006	White plastic (pole stopper)	
007	Translucent soft plastic (pole stopper)	

Sample	Description	Photo
008	Black plastic (pole plµg)	
009	Black soft plastic (delivery port)	
010	Black soft plastic (gasket)	
011	Dark grey soft plastic ring	

Sample	Description	Photo
012	Brown grey soft plastic (base)	
013	Light brown plastic (base)	
014	Brown grey plastic (lid)	
015	Dark grey plastic	

Sample	Description	Photo
016	Light blue soft plastic	

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

Test Results

1. EN 16582-1:2015+A1:2021 Domestic swimming pools Part 1: General requirements including safety and test methods

<table>
<tr><th>Clause</th><th>Requirement</th><th>Result</th><th>Verdict</th></tr>
<tr><td>4</td><td colspan="3">General requirements and test methods</td></tr>
<tr><td>4.1</td><td colspan="3">General</td></tr>
<tr><td></td><td>In use, installed according to the installation and commissioning manual, the swimming pool shall meet the requirements of this document.

If the pool structure includes any water system covered by the EN 16713, the present document EN 16582 series shall be read in conjunction with the EN 16713 series.

Assembled in accordance with the installation and commissioning manual, the electrical installation of any material related to the pool and its surrounding shall also comply with the requirements of HD EN 60364-7-702 or valid national requirements.

When a membrane is used as a watertight system, it is not mandatory to have a minimum thickness; however any relevant standards shall apply if they exist.

All manufacturers are required to carry out, either internally or via a test laboratory, the tests mentioned in section 4 for each new or revised material process.</td><td>Complied</td><td>P</td></tr>
<tr><td>4.2</td><td colspan="3">Tolerances</td></tr>
<tr><td></td><td>The indicated dimensions and measurements are given with a tolerance of ±3% (unless otherwise indicated).</td><td>Complied</td><td>P</td></tr>
<tr><td>4.3</td><td colspan="3">Water leakage</td></tr>
<tr><td></td><td>Wherever possible, swimming pools should be built so that they are watertight, as leakage and other water losses may affect the building and surrounding properties. The maximum leakage is specified in Table 1.
Table 1 - Watertightness classification
<table>
<tr><th>Tightness Class</th><th>Maximum leakage
liter per m² per day or mm per day</th></tr>
<tr><td>W_0</td><td>0</td></tr>
<tr><td>W_1</td><td>1</td></tr>
<tr><td>W_2</td><td>2</td></tr>
<tr><td>W_3</td><td>3</td></tr>
</table></td><td>Water leakage: 0</td><td>p</td></tr>
<tr><td>4.4</td><td colspan="3">Minimum performance requirements for structural materials</td></tr>
<tr><td>4.4.1</td><td>General</td><td>Complied</td><td>P</td></tr>
<tr><td>4.4.2</td><td>Specific requirements and testing for corrosion resistance</td><td>Complied</td><td>P</td></tr>
<tr><td>4.4.3</td><td>Osmosis resistance of composites and polymers</td><td>Complied</td><td>P</td></tr>
<tr><td>4.4.4</td><td>Wood</td><td>No Wood</td><td>NA</td></tr>
<tr><td>4.5</td><td colspan="3">Injury risks</td></tr>
<tr><td>4.5.1</td><td colspan="3">Small elements, edges and corners</td></tr>
<tr><td></td><td>When the swimming 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</td><td>Complied</td><td>P</td></tr>
</table>

Clause	Requirement	Result	Verdict
	to be removed, requires the use of a tool or a minimum amount of force of 60N, with an accuracy of 2 N.		
	During the installation, equipment made of wood, fiberglass, or other materials shall be free of splinters.	Complied	P
	Small accessible and graspable elements shall not fully enter into the small part template (EN 71-1) 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.	Complied	P
	All edges, protruding parts and corners accessible without use of tools or minimum amount of force of 60N (±2N) shall be designed not to cause any injury. When necessary they shall be treated appropriately to remove this risk. For example, edges can be beveled or rounded, and surfaces shall be smooth and free from burrs.	Complied	P
4.5.2	**Permissible openings**		
4.5.2.1	**Principle**		
	To prevent entrapment hazards inside the pool structure, accessible openings with the lowest point located beyond 500 mm below the water surface shall be restricted to the range of opening or gap size dimensions specified in 4.5.2.2 to 4.5.2.3, unless specifically permitted in other clauses/annexes of this standard and/or parts of this standard series. If the depth of penetration is less than 10mm, no requirements apply.	See below	P
4.5.2.2	**Finger and toe entrapment**		
	Where there is a risk of finger or toe entrapment, the permissible opening shall be ≤ 8 mm or ≥ 25 mm.	Complied	P
4.5.2.3	**Head and neck entrapment**		
	Where there is a risk of head or neck entrapment, the permissible opening shall be ≤ 110 mm or ≥ 230 mm. Where an opening is ≥ 230 mm it should not permit passage to further entrapment hazards. Where there is a combination of risks, the lesser of the permitted opening sizes shall be used.	Complied	P
4.5.2.4	**Other body entrapment**		
	Other permissible openings include the range between 25 mm and 110 mm. When such openings are used for construction or installation reasons, the installer shall alert their customer of a potential risk of entrapment.	Complied	P
4.6	**Accessibility**		
4.6.1	**General**		
	The risk of drowning for children (especially under 5 years) is high and reasonably predictable, either during the bathing period or at other times. Therefore it is recommended for adult supervisors to: – secure the means of access to the swimming pool; or – install a protection device; and – keep the children under constant supervision. For pools relying on a specific means of egress such means shall not be removed when the pool is in use.	Security of the ladders for accessing the swimming pool and Hint to keep the children under supervision by marking.	P
4.6.2	**Safe access to the swimming pool**		
	The access to the above ground pools or partially buried pools (coming from outside to inside the pool) can be secured by using a safe access according to the requirements stated in § 5.4.4. Moreover the swimming pool shall be designed such that, once installed, unauthorized access to the pool for	Proper information was indicated	P

Clause	Requirement	Result	Verdict
	children (especially those under the age of five years) by striding over/climbing over is limited. The safe access to the basin is met when: – the height between the highest bearing point (according to the requirements stated in 5.5) and the upper level of the finished pool is greater than or equal to 1100 mm or; – the height between the ground and the lowest bearing point (according to the requirements stated in 5.5) is greater than or equal to 1100 mm, or; – the height between two consecutive bearing points (according to the requirements stated in 5.5) is greater than 1100 mm. If: – the above requirement is not satisfied and/or – the means of access according to the requirements stated in 5.4.4 is not safe; or – no means of access is provided with the swimming pool. Then the manufacturer of the swimming pool shall recommend that the access to the finished swimming pool should be secured by a protection device to prevent children drowning. To prevent children drowning, inground pool manufacturers shall also recommend to secure the access to the finished pool with a protection device. The following warning "In order to prevent children from drowning, it is recommended to secure the access to the pool with a protection device" shall be present for the consumer in the information before purchase and in the safety instructions.	in the manual for guiding the security of the ladders for accessing the swimming pool. Warning information was indicated in the packaging and manual properly.	
5	**Requirements and test methods for means of access**	Complied	P
6	**Instructions for the consumer**		
6.1	**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, swimming pool or swimming pool kit 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
	When the instructions contain several pages, the manuals shall be document with 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
6.2	**Self-built/installed pools**		
6.2.1	**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 kit type : “Inground or aboveground or recessed swimming pool kit”;	Complied	P
	the commercial name or reference;	Complied	P
	the dimension of the water body;	Complied	P
	the maximum effective water depth;	Complied	P
	the maximum total overall dimension;	Complied	P

Clause	Requirement	Result	Verdict
	the effective volume of water;	Complied	P
	all indications regarding the construction of reinforcement works related to the kit type;	-	N/A
	the composition of the swimming pool kit (examples: pool structure, ladder, filtration system, etc.);	Complied	P
	the number of people required for the installation;	Complied	P
	the approximate time required to install the swimming pool kit, excluding earthworks and filling;	Complied	P
	the warranty period(s) of the provided elements of the swimming pool kit;	Complied	P
	the following or equivalent warning: "The use of a swimming pool implies compliance with the safety instructions described in the operating and maintenance guide. In order to prevent drowning or other serious injuries, pay particular attention to the possibility of unexpected access to the swimming pool by children under 5 years by securing the access to it, and, during the bathing period, keep them under constant adult supervision";	Complied	P
	the tightness class	Complied	P
	awareness of the risk of drowning in the swimming pool;	Complied	P
	adult supervision of children;	Complied	P
	awareness of the risk of diving, if applicable.	Complied	P
	The seller shall indicate to the purchaser that they should consult the local building code for any applicable installation requirements.	Complied	P
6.2.2	**Installation and commissioning manual**		
	The installation and commissioning manual shall contain all of the information necessary for a correct and complete installation, and in particular the following information:		
	ground preparation including, if appropriate, specific recommendations concerning the type of soil;	Complied	P
	the number of people required for the installation;	Complied	P
	the approximate time required for the entire installation, excluding earthworks and filling;	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 swimming pool kit as well as their use;	Complied	P
	the address or telephone number where the consumer can obtain additional information during the installation of the swimming pool kit, in the event of problems;	Complied	P
	all of the structural works necessary for the proper construction of the structure.	Complied	P
6.2.3	**Operating and maintenance manual**		
	The swimming pool kit shall be accompanied by an operating and maintenance manual. These manuals shall contain all the information necessary for a correct use of the pool structure. The operating and maintenance manual shall also contain:	Complied	P
	the safety instructions	Complied	P
	recommendations concerning the filling level;	Complied	P
	if appropriate, recommendations concerning the need to monitor bolts and screws; splinters or any sharp edges;	Complied	P
	a warning about the hazards resulting from complete emptying of the basin;	Complied	P
	recommendations on winterizing and long-term storage;	Complied	P
	irrespective of materials used for swimming pool construction, accessible surfaces have to be checked regularly to avoid injuries.	Complied	P

Clause	Requirement	Result	Verdict
	More detailed information may be provided with each element of the swimming pool kit	Complied	P
6.3	**Constructed / installed pools by professionals**		
6.3.1	**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;	Not constructed / installed pool	NA
	the commercial name or reference;		
	the dimension of the water body;		
	the maximum effective water depth;		
	the maximum total overall dimension;		
	the effective volume of water;		
	the warranty period(s) of the installed products;		
	the following or equivalent warning: "In order to prevent drowning and other serious injuries:		
	The use of a pool implies compliance with the safety instructions described in the operating and maintenance guide.		
	Pay particular attention to the possibility of unexpected access to the swimming pool by children under 5 years by securing the access to it.		
	During the bathing period, keep them under constant adult supervision.		
	the tightness class.		
6.3.2	**Operating and maintenance manual**		
	The swimming pool shall be accompanied by an operating and maintenance manual. These manuals shall contain the information necessary for the correct use of the pool structure. The operating and maintenance manual shall also contain:	Not constructed / installed pool	NA
	the safety instructions;		
	recommendations concerning the filling level;		
	if appropriate, recommendations concerning the need to monitor bolts and screws; splinters or any sharp edges;		
	a warning about the hazards resulting from complete emptying of the basin;		
	recommendations on winterizing and long-term storage.		
6.4	**Means of access**	Complied	P
6.5	**Examples illustrating pool sizes**	Complied	P
7	**Safety signage**		
	All swimming pools (whether manufactured or constructed) shall be provided with: – the safety sign in Figure 15 and/or the following text: " Keep children under supervision in the aquatic environment ", and – the safety sign in Figure 16 and/or the following text: "No diving" where applicable. Instructions shall be given to affix the safety sign on the pool and/or the text within 2000 mm of the pool in a prominent visible position. 	Complied	P

Clause	Requirement	Result	Verdict
	Figure 15 —— safety sign – ISO 20712-1 – WSM002, Keep children under supervision in the aquatic environment		
			
	Figure 16 —— Safety sign ISO 20712-1 - WSP005, No diving		

Abbreviation: P = Pass; NA = Not Applicable.

2. EN 16582-3:2015 Domestic swimming pools Part 3: Specific requirements including safety and test methods for aboveground pools

Clause	Requirement	Result	Verdict
4	**Requirements and test methods specific to aboveground swimming pool**		
4.1	**General**		
	For new basin designs and for existing basin constructions that are structurally modified, the following tests shall be carried out with at least one test sample.	Complied	P
4.2	**Aboveground swimming pool with frame-supporting walls**		
4.2.1	**Resistance to horizontal deformation**		
4.2.1.1	**Requirements**	Complied	P
	On completion of the test, the swimming pool shall not collapse and shall meet there quirements set forth in EN 16582-1 clause 4.5.		
4.2.2	**Resistance to vertical deformation**		
4.2.2.1	**Requirements**	Complied	P
	On completion of the test defined, the entire product shall not suffer any permanent deformation affecting its structural integrity.		
4.2.3	**Bursting strength**		
4.2.3.1	**General**		
	The bursting strength test is performed after carrying out the resistance tests for horizontal deformation (4.2.1.2) and vertical deformation (4.2.2.2).	Complied	P
4.2.3.2	**Requirements**	Complied	P
	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 structural integrity.		
4.3	**Aboveground swimming pool with self-stabilising walls**		
4.3.1	**Capacity to stop an overflow**		
4.3.1.1	**Requirement**	Frame-supporting pool	NA
	On completion of the tests described in 4.3.1.2 (Pool overflow) and 4.3.1.3 (Behavior test of the wall under load), the swimming pool with self-stabilizing walls shall not collapse or empty suddenly.		
4.3.2	**Inflatable compartment**		
	The swimming pool with self-stabilising walls generally comprises an air-inflatable upper tube. In this case, 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 swimming pool with self-stabilising walls. Once this part is inflated, the caps located inside the swimming pool with self-stabilizing walls 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. Check valves shall be fitted in order to prevent an instantaneous deflation.	Frame-supporting pool	NA
4.3.3	**Stability in the event of deflation of the upper tube**		
4.3.3.1	**Requirement**	Frame-supporting pool	NA
	On completion of the test, the swimming pool with self-stabilising walls shall not collapse.		
4.3.4	**Bursting strength**		
4.3.4.1	**Requirement**	Frame-supporting	NA
	On completion of the test defined in, the swimming pool with self-		

Clause	Requirement	Result	Verdict
	stabilising walls shall not burst and shall not present any permanent deformation affecting the product's resistance.	pool	
4.4	**Mechanical strength of the membrane of a swimming pool with tubular frame and/or flexible structure**		
	The membranes composing the structure of swimming pools shall meet the following requirements:		
	– Wall tear resistance according to EN 1875-3 and EN ISO 4674-2. Acceptable results: – warp direction: 10 DaN; – weft direction: 5 DaN.	Complied	P
	– Wall/wall weld tensile/breaking strength according to EN ISO 1421 Acceptable results: – warp direction: 100 DaN/50 mm; – weft direction if applicable: 100 DaN/50 mm.		
	– Adhesion test according to EN ISO 2411 Acceptable results: – warp direction: 9 DaN/50 mm; – weft direction: 9 DaN/50 mm.		

Abbreviation: P = Pass; NA = Not Applicable

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
001	mg/kg	10	500	<10.0	**Pass**
002	mg/kg	10	500	<10.0	**Pass**
003	mg/kg	10	500	<10.0	**Pass**
004	mg/kg	10	500	<10.0	**Pass**
005	mg/kg	10	500	<10.0	**Pass**
006	mg/kg	10	500	<10.0	**Pass**
007	mg/kg	10	500	<10.0	**Pass**
008	mg/kg	10	500	<10.0	**Pass**
009	mg/kg	10	500	<10.0	**Pass**
010	mg/kg	10	500	<10.0	**Pass**
011	mg/kg	10	500	<10.0	**Pass**
012	mg/kg	10	500	<10.0	**Pass**
013	mg/kg	10	500	<10.0	**Pass**
014	mg/kg	10	500	<10.0	**Pass**
015	mg/kg	10	500	<10.0	**Pass**
016	mg/kg	10	500	<10.0	**Pass**

4. 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
001	mg/kg	5	<100	<5.0	**Pass**
002	mg/kg	10	<1000	<10.0	**Pass**
003	mg/kg	5	<100	<5.0	**Pass**
004	mg/kg	5	<100	<5.0	**Pass**
005	mg/kg	5	<100	<5.0	**Pass**
006	mg/kg	5	<100	<5.0	**Pass**
007	mg/kg	5	<100	<5.0	**Pass**
008	mg/kg	5	<100	<5.0	**Pass**
009	mg/kg	5	<100	<5.0	**Pass**
010	mg/kg	5	<100	<5.0	**Pass**
011	mg/kg	5	<100	<5.0	**Pass**
012	mg/kg	5	<100	<5.0	**Pass**
013	mg/kg	5	<100	<5.0	**Pass**
014	mg/kg	5	<100	<5.0	**Pass**
015	mg/kg	5	<100	<5.0	**Pass**
016	mg/kg	5	<100	<5.0	**Pass**

5. Phthalates Content

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

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001	002
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
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	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
Di-n-hexyl phthalate(DnHP/DHP/DHEXP)	84-75-3	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	%	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
Dipentyl phthalate (DPP/DPENP)	131-18-0	%	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	%	0.005	<0.1	ND	ND
Di-iso-hexylphthalate (DIHxP)	71850-09-4	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, Di(C6-C10)alkyl phthalate	68515-51-5 68648-93-1	%	0.005	<0.1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					003	004
Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	%	0.005	<0.1	0.006	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
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	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
Di-n-hexyl phthalate(DnHP/DHP/DHEXP)	84-75-3	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	%	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
Dipentyl phthalate (DPP/DPENP)	131-18-0	%	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	%	0.005	<0.1	ND	ND
Di-iso-hexylphthalate (DIHxP)	71850-09-4	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, Di(C6-C10)alkyl phthalate	68515-51-5 68648-93-1	%	0.005	<0.1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005	006
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
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	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
Di-n-hexyl phthalate(DnHP/DHP/DHEXP)	84-75-3	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	%	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
Dipentyl phthalate (DPP/DPENP)	131-18-0	%	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	%	0.005	<0.1	ND	ND
Di-iso-hexylphthalate (DIHxP)	71850-09-4	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, Di(C6-C10)alkyl phthalate	68515-51-5 68648-93-1	%	0.005	<0.1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					007	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
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	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
Di-n-hexyl phthalate(DnHP/DHP/DHEXP)	84-75-3	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	%	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
Dipentyl phthalate (DPP/DPENP)	131-18-0	%	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	%	0.005	<0.1	ND	ND
Di-iso-hexylphthalate (DIHxP)	71850-09-4	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, Di(C6-C10)alkyl phthalate	68515-51-5 68648-93-1	%	0.005	<0.1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					009	010
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
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	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
Di-n-hexyl phthalate(DnHP/DHP/DHEXP)	84-75-3	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	%	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
Dipentyl phthalate (DPP/DPENP)	131-18-0	%	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	%	0.005	<0.1	ND	ND
Di-iso-hexylphthalate (DIHxP)	71850-09-4	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, Di(C6-C10)alkyl phthalate	68515-51-5 68648-93-1	%	0.005	<0.1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					011	012
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
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	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
Di-n-hexyl phthalate(DnHP/DHP/DHEXP)	84-75-3	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	%	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
Dipentyl phthalate (DPP/DPENP)	131-18-0	%	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	%	0.005	<0.1	ND	ND
Di-iso-hexylphthalate (DIHxP)	71850-09-4	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, Di(C6-C10)alkyl phthalate	68515-51-5 68648-93-1	%	0.005	<0.1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013	014
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
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	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
Di-n-hexyl phthalate(DnHP/DHP/DHEXP)	84-75-3	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	%	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
Dipentyl phthalate (DPP/DPENP)	131-18-0	%	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	%	0.005	<0.1	ND	ND
Di-iso-hexylphthalate (DIHxP)	71850-09-4	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, Di(C6-C10)alkyl phthalate	68515-51-5 68648-93-1	%	0.005	<0.1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					015	016
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
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	<0.1	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	%	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
Di-n-hexyl phthalate(DnHP/DHP/DHEXP)	84-75-3	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	%	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
Dipentyl phthalate (DPP/DPENP)	131-18-0	%	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	%	0.005	<0.1	ND	ND
Di-iso-hexylphthalate (DIHxP)	71850-09-4	%	0.005	<0.1	ND	ND
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, Di(C6-C10)alkyl phthalate	68515-51-5 68648-93-1	%	0.005	<0.1	ND	ND
Conclusion					**Pass**	**Pass**

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

6. 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)	
					001	002
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<1	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					003	004
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<1	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005	006
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<1	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					007	008
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<1	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					009	010
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<1	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					011	012
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<1	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013	014
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<1	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<1	ND	ND
Conclusion					**Pass**	**Pass**

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					015	016
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	<1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	<1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	<1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	<1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	<1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	<1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	<1	ND	ND
Dibenzo[a,h]anthracene (DBAhA)	53-70-3	mg/kg	0.1	<1	ND	ND
Conclusion					**Pass**	**Pass**

7. 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		
				001	002	003
DBT	mg/kg	0.025	<1000	0.046	<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		
				004	005	006
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		
				007	008	009
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	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		
				013	014	015
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
				016
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**

8. Short Chain Chlorinated Paraffins (SCCPs) Content – in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)

Test with reference to in house method, solvent extraction by ultrasonic bath and determination by GC-MS-NCI.

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					001
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					**Pass**

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					002
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					**Pass**

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					003
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					**Pass**

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					004
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					**Pass**

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					005
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					006
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					007
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					008
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					009
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					010
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					011
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					012
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					013
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					014
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					**Pass**

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					015
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					**Pass**

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					016
SCCP	85535-84-8	%	0.01	0.1	<0.01
Conclusion					**Pass**

- End of Test Report -