



**SUBJECT** Chemical Test

**TEST LOCATION** TÜV SÜD China

TÜV SÜD Products Testing (Shanghai) Co., Ltd.  
B-3/4, No.1999 Du Hui Road, Minhang District  
Shanghai 201108, P.R. China

**CLIENT NAME** Alpha Advanced Technologies, Co., Ltd.

**CLIENT ADDRESS** G/F, 631-633 Reclamation Street, Mongkok, Kowloon, Hong Kong

**TEST PERIOD** 12-Jun-2020~18-Jun-2020

**TEST REQUEST** According to European Commission Regulation 1907/2006(REACH Act),to test the SVHC content which have been listed in ECHA'SVHC candidate list till 16 January, 2020.

**RESULT SUMMARY** According to European Commission Regulation 1907/2006(REACH Act),to test the SVHC content which have been listed in ECHA'SVHC candidate list till 16 January, 2020

**PASS**

**Prepared By**

*Judy hu*

( Judy Hu )  
Report Drafter

**Authorized By**

*Leo liu*

( Leo Liu )  
Authorized Signatory

**Note:** (1) General Terms & Conditions as mentioned overleaf. (2) The results relate only to the items tested.(3) The test report shall not be reproduced except in full without the written approval of the laboratory.(4) Without the agreement of the laboratory , the client is not authorized to use the test results for unapproved propaganda.



**RECEIPT DATE / TEST DATE**

12-Jun-2020/ 12-Jun-2020

**THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED**

**BY/ ON BEHALF OF THE CLIENTS AS**

Sample Name: UBET Clean Zeolite Functional Materials  
Sample Type: 12g/bag  
Batch No./Date: 20200521  
Manufacturer: /

SAMPLE NO.	DESCRIPTION	PHOTOGRAPH
72165551	Sample in bag	

**TEST RESULT(S)**

1. SVHC Content

- Test method: Test portion is digested with acid, the elements are analyzed by ICP-OES and UV-VIS
- Organic solvent extraction, analyzed by GC-MS, LC-MS, HPLC-DAD

No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
1	2,4-Dinitrotoluene	204-450-0	121-14-2	0.01	ND
2	2-Ethoxyethanol	203-804-1	110-80-5	0.01	ND
3	2-Methoxyethanol	203-713-7	109-86-4	0.01	ND
4	4,4'- Diaminodiphenylmethane(MDA)	202-974-4	101-77-9	0.01	ND
5	5-tert-butyl-2,4,6-trinitro-m-xylene	201-329-4	81-15-2	0.01	ND
6	Acrylamide	201-173-7	79-06-1	0.01	ND
7	Alkanes,C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	0.01	ND
8	Ammonium dichromate**	232-143-1	7789-09-5	0.01	ND
9	Anthracene	204-371-1	120-12-7	0.01	ND
10	Anthracene oil###	292-602-7	90640-80-5	0.01	ND
11	Anthracene oil, anthracene paste###	292-603-2	90640-81-6	0.01	ND
12	Anthracene oil,anthracene paste, Anthracene fraction###	295-275-9	91995-15-2	0.01	ND



No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
13	Anthracene oil, anthracene paste; distn. Lights##	295-278-5	91995-17-4	0.01	ND
14	Anthracene oil, anthracene-low##	292-604-8	90640-82-7	0.01	ND
15	Benzyl butyl phthalate(BBP)	201-622-7	85-68-7	0.01	ND
16	Bis(2-ethylhexyl)phthalate(DEHP)	204-211-0	117-81-7	0.01	ND
17	Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9	0.01	ND
18	Boric acid**	233-139-2/ 234-343-4	10043-35-3/ 11113-50-1	0.01	ND
19	Acids generated from chromium trioxide and their oligomers** Chromic acid EC no.: 231-801-5   CAS no.:13530-68-2, 7738-94-5 Oligomers of chromic acid and dichromic acid EC no.: -   CAS no.: - Dichromic acid EC no.: 236-881-5   CAS no.: 13530-68-2, 7738-94-5	---	---	0.01	ND
20	Chromium trioxide**	215-607-8	1333-82-0	0.01	ND
21	Cobalt dichloride**	231-589-4	7646-79-9	0.01	ND
22	Cobalt(II) carbonate**	208-169-4	513-79-1	0.01	ND
23	Cobalt(II) diacetate**	200-755-8	71-48-7	0.01	ND
24	Cobalt(II) dinitrate**	233-402-1	10141-05-6	0.01	ND
25	Cobalt(II) sulphate**	233-334-2	10124-43-3	0.01	ND
26	Diarsenic pentaoxide**	215-116-9	1303-28-2	0.01	ND
27	Diarsenic trioxide**	215-481-4	1327-53-3	0.01	ND
28	Dibutyl Phthalate(DBP)	201-557-4	84-74-2	0.01	ND
29	Diisobutyl phthalate(DIBP)	201-553-2	84-69-5	0.01	ND
30	Disodium tetraborate, anhydrous**	215-540-4	1303-96-4/ 1330-43-4/ 12179-04-3	0.01	ND
31	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified 1,2,5,6,9,10-hexabromocyclodecane EC no.: 221-695-9   CAS no.: 3194-55-6 gamma-hexabromocyclododecane EC no.: -   CAS no.: 134237-52-8 Hexabromocyclododecane EC no.: 247-148-4   CAS no.: 25637-99-4 alpha-hexabromocyclododecane EC no.: -   CAS no.: 134237-50-6 beta-hexabromocyclododecane EC no.: -   CAS no.: 134237-51-7	---	---	0.01	ND
32	Lead chromate**	231-846-0	7758-97-6	0.01	ND
33	Lead chromate molybdate sulfate red (C.I. Pigment Red 104)**	235-759-9	12656-85-8	0.01	ND



No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
34	Lead hydrogen arsenate**	232-064-2	7784-40-9	0.01	ND
35	Lead sulfochromate yellow (C.I. Pigment Yellow 34)**	215-693-7	1344-37-2	0.01	ND
36	Coal tar pitch, high temperature###	266-028-2	65996-93-2	0.01	ND
37	Potassium chromate**	232-140-5	7789-00-6	0.01	ND
38	Potassium dichromate**	231-906-6	7778-50-9	0.01	ND
39	Sodium chromate**	231-889-5	7775-11-3	0.01	ND
40	Sodium dichromate**	234-190-3	7789-12-0/ 10588-01-9	0.01	ND
41	Tetraboron disodium heptaoxide, hydrate**	235-541-3	12267-73-1	0.01	ND
42	Trichloroethylene	201-167-4	79-01-6	0.01	ND
43	Triethyl arsenate**	427-700-2	15606-95-8	0.01	ND
44	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	0.01	ND
45	2-ethoxyethyl acetate	203-839-2	111-15-9	0.01	ND
46	Strontium chromate**	232-142-6	7789-06-2	0.01	ND
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	0.01	ND
48	Hydrazine	206-114-9	7803-57-8 302-01-2	0.01	ND
49	1-methyl-2-pyrrolidone	212-828-1	872-50-4	0.01	ND
50	1,2,3-trichloropropane	202-486-1	96-18-4	0.01	ND
51	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6	0.01	ND
52	Lead dipicrate**	229-335-2	6477-64-1	0.01	ND
53	Lead styphnate**	239-290-0	15245-44-0	0.01	ND
54	Lead diazide**	236-542-1	13424-46-9	0.01	ND
55	Phenolphthalein	201-004-7	77-09-8	0.01	ND
56	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	202-918-9	101-14-4	0.01	ND
57	N,N-dimethylacetamide	204-826-4	127-19-5	0.01	ND
58	Trilead diarsenate**	222-979-5	3687-31-8	0.01	ND
59	Calcium arsenate**	231-904-5	7778-44-1	0.01	ND
60	Arsenic acid**	231-901-9	7778-39-4	0.01	ND
61	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	0.01	ND
62	1,2-Dichloroethane	203-458-1	107-06-2	0.01	ND
63	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	205-426-2	140-66-9	0.01	ND



No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
64	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	0.01	ND
65	Bis(2-methoxyethyl) phthalate(DMEP)	204-212-6	117-82-8	0.01	ND
66	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	0.01	ND
67	Zr-RCF(Zirconia Aluminosilicate Refractory Ceramic Fibres)**	---	---	0.01	ND
68	Aluminosilicate Refractory Ceramic Fibres (RCF)**	---	---	0.01	ND
69	Pentazinc chromate octahydroxide**	256-418-0	49663-84-5	0.01	ND
70	Potassium hydroxyoctaoxodizincate di-chromate**	234-329-8	11103-86-9	0.01	ND
71	Dichromium tris(chromate)**	246-356-2	24613-89-6	0.01	ND
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	0.01	ND
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	0.01	ND
74	Diboron trioxide**	215-125-8	1303-86-2	0.01	ND
75	Formamide	200-842-0	75-12-7	0.01	ND
76	Lead(II) bis(methanesulfonate)**	401-750-5	17570-76-2	0.01	ND
77	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	219-514-3	2451-62-9	0.01	ND
78	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	423-400-0	59653-74-6	0.01	ND
79	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	0.01	ND
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	0.01	ND
81	4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet3) <sup>#</sup>	208-953-6	548-62-9	0.01	ND
82	4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26) <sup>#</sup>	219-943-6	2580-56-5	0.01	ND
83	α,α-Bis[4-(dimethylamino) phenyl]-4(phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4) <sup>#</sup>	229-851-8	6786-83-0	0.01	ND
84	4,4'-bis(dimethylamino)-4''-(methylamino) trityl alcohol <sup>#</sup>	209-218-2	561-41-1	0.01	ND
85	Decabromodiphenyl ether (DecaBDE)	214-604-9	1163-19-5	0.01	ND
86	Pentacosafuorotridecanoic acid	276-745-2	72629-94-8	0.01	ND
87	Tricosafuorododecanoic acid	206-203-2	307-55-1	0.01	ND
88	Henicosafuoroundecanoic acid	218-165-4	2058-94-8	0.01	ND



No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
89	Heptacosafuorotetradecanoic acid	206-803-4	376-06-7	0.01	ND
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated-covering well-defined substances and UVCB substances, polymers and homologues	---	---	0.01	ND
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 ell-defined substances which include any of the individual isomers or a combination thereof	---	---	0.01	ND
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))(ADCA)	204-650-8	123-77-3	0.01	ND
93	Cyclohexane-1,2-dicarboxylic anhydride all possible combinations of the cis- and trans-isomers cis-cyclohexane-1,2-dicarboxylic anhydride EC no.: 236-086-3   CAS no.:13149-00-3 Cyclohexane-1,2-dicarboxylic anhydride EC no.: 201-604-9   CAS no.: 85-42-7 trans-cyclohexane-1,2-dicarboxylic anhydride EC no.: 238-009-9   CAS no.:14166-21-3	---	---	0.01	ND
94	Hexahydromethylphthalic anhydride, including cis- and trans- stereo isomeric forms and all possible combinations of the isomers Hexahydro-4-methylphthalic anhydride EC no.: 243-072-0   CAS no.: 19438-60-9 Hexahydromethylphthalic anhydride EC no.: 247-094-1   CAS no.: 25550-51-0 Hexahydro-1-methylphthalic anhydride EC no.: 256-356-4   CAS no.: 48122-14-1 Hexahydro-3-methylphthalic anhydride EC no.: 260-566-1   CAS no.: 57110-29-9	---	---	0.01	ND
95	Methoxy acetic acid	210-894-6	625-45-6	0.01	ND
96	1,2-Benzenedicarboxylic acid, dipent lester, branched and linear	284-032-2	84777-06-0	0.01	ND
97	Diisopentyl phthalate (DIPP)	210-088-4	605-50-5	0.01	ND
98	N-pentyl-isopentylphtalate	---	776297-69-9	0.01	ND
99	1,2-Diethoxyethane	211-076-1	629-14-1	0.01	ND
100	N,N-dimethylformamide	200-679-5	68-12-2	0.01	ND
101	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	0.01	ND
102	Acetic acid, lead salt, basic**	257-175-3	51404-69-4	0.01	ND





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103	Trilead bis(carbonate) dihydroxide**	215-290-6	1319-46-6	0.01	ND
104	Lead oxide sulfate (basic lead sulfate)**	234-853-7	12036-76-9	0.01	ND
105	Phthalato(2-)]dioxotrilead (dibasic lead phthalate)**	273-688-5	69011-06-9	0.01	ND
106	Dioxobis(stearato)trilead**	235-702-8	12578-12-0	0.01	ND
107	Fatty acids, C16-18, lead salts**	292-966-7	91031-62-8	0.01	ND
108	Lead bis(tetrafluoroborate)**	237-486-0	13814-96-5	0.01	ND
109	Lead cyanamidate**	244-073-9	20837-86-9	0.01	ND
110	Lead dinitrate**	233-245-9	10099-74-8	0.01	ND
111	Lead oxide (lead monoxide)**	215-267-0	1317-36-8	0.01	ND
112	Lead tetroxide (orange lead)**	215-235-6	1314-41-6	0.01	ND
113	Lead titanium trioxide**	235-038-9	12060-00-3	0.01	ND
114	Lead Titanium Zirconium Oxide**	235-727-4	12626-81-2	0.01	ND
115	Pentalead tetraoxide sulphate**	235-067-7	12065-90-6	0.01	ND
116	Pyrochlore, antimony lead yellow C.I.**	232-382-1	8012-00-8	0.01	ND
117	Silicic acid (H <sub>2</sub> SiO <sub>5</sub> ), barium salt (1:1), lead-doped** with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD), the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008	272-271-5	68784-75-8	0.01	ND
118	Silicic acid, lead salt**	234-363-3	11120-22-2	0.01	ND
119	Sulfurous acid, lead salt, dibasic**	263-467-1	62229-08-7	0.01	ND
120	Tetraethyllead**	201-075-4	78-00-2	0.01	ND
121	Tetralead trioxide sulphate**	235-380-9	12202-17-4	0.01	ND
122	Trilead dioxide phosphonate**	235-252-2	12141-20-7	0.01	ND
123	Furan	203-727-3	110-00-9	0.01	ND
124	Methyloxirane (Propylene oxide)	200-879-2	75-56-9	0.01	ND
125	Diethyl sulphate	200-589-6	64-67-5	0.01	ND
126	Dimethyl sulphate	201-058-1	77-78-1	0.01	ND
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine3-	421-150-7	143860-04-2	0.01	ND
128	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	0.01	ND
129	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	0.01	ND



No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
130	4,4'-oxydianiline and its salts	202-977-0	101-80-4	0.01	ND
131	4-Aminoazobenzene	200-453-6	60-09-3	0.01	ND
132	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	202-453-1	95-80-7	0.01	ND
133	9-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	0.01	ND
134	Biphenyl-4-ylamine	202-177-1	92-67-1	0.01	ND
135	o-aminoazotoluene	202-591-2	97-56-3	0.01	ND
136	o-Toluidine	202-429-0	95-53-4	0.01	ND
137	N-methylacetamide	201-182-6	79-16-3	0.01	ND
138	1-bromopropane; n-propyl bromide	203-445-0	106-94-5	0.01	ND
139	Cadmium**	231-152-8	7440-43-9	0.01	ND
140	Cadmium oxide**	215-146-2	1306-19-0	0.01	ND
141	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	0.01	ND
142	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	0.01	ND
143	Dipentyl phthalate (DPP)	205-017-9	131-18-0	0.01	ND
144	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	---	---	0.01	ND
145	Cadmium sulphide**	215-147-8	1306-23-6	0.01	ND
146	Dihexyl phthalate (DHXP)	201-559-5	84-75-3	0.01	ND
147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	573-58-0	0.01	ND
148	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)	217-710-3	1937-37-7	0.01	ND
149	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7	0.01	ND
150	Lead di(acetate) (II)**	206-104-4	301-04-2	0.01	ND
151	Trixylenyl phosphate	246-677-8	25155-23-1	0.01	ND
152	1,2-Benzenedicarboxylic acid, dihexylester, branched and linear	271-093-5	68515-50-4	0.01	ND





No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
153	Sodium perborate; perboric acid, sodium salt** Sodium perborate EC no.: 239-172-9   CAS no.: 15120-21-5 Perboric acid, sodium salt EC no.: 234-390-0   CAS no.: 11138-47-9	---	---	0.01	ND
154	Sodium peroxometaborate**	231-556-4	7632-04-4	0.01	ND
155	Cadmium chloride**	233-296-7	10108-64-2	0.01	ND
156	Cadmium fluoride**	232-222-0	7790-79-6	0.01	ND
157	Cadmium sulphate**	233-331-6	10124-36-4; 31119-53-6	0.01	ND
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol(UV-320)	223-346-6	3846-71-7	0.01	ND
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol(UV328)	247-384-8	25973-55-1	0.01	ND
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-tannatetradecanoate	239-622-4	15571-58-1	0.01	ND
161	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxa-3,5-dithia-4-stannatetradecanoate	---	---	0.01	ND
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate 1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters EC no.: 271-094-0   CAS no.:68515-51-5 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters EC no.:272-013-1   CAS no.: 68648-93-1	---	---	0.01	ND
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 stereoisomers of [1] and [2] or any combination thereof 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane EC no.: -   CAS no.: - 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane EC no.: -   CAS no.: -	---	---	0.01	ND
164	1,3-propanesultone	214-317-9	1120-71-4	0.01	ND
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol(UV-327)	223-383-8	3864-99-1	0.01	ND
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol(UV-350)	253-037-1	36437-37-3	0.01	ND

SHANGHAI TUV SUD CERTIFICATION AND TESTING (CHINA) CO., LTD.



No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
167	Nitrobenzene	202-716-0	98-95-3	0.01	ND
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts Ammonium salts of perfluorononan-1-oic-acid EC no.: -   CAS no.: -, 4149-60-4 Perfluorononan-1-oic-acid EC no.: 206-801-3   CAS no.: 375-95-1 Sodium salts of perfluorononan-1-oic-acid EC no.: -   CAS no.: -, 21049-39-8	---	---	0.01	ND
169	Benzo[def]chrysene (Benzo[a]pyrene)	200-028-5	50-32-8	0.01	ND
170	4,4'-isopropylidenediphenol (bisphenol A; BPA)	201-245-8	80-05-7	0.01	ND
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	206-400-3 --- 221-470-5	335-76-2 3830-45-3 3108-42-7	0.01	ND
172	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]	---	---	0.01	ND
173	p-(1,1-dimethylpropyl)phenol	201-280-9	80-46-6	0.01	ND
174	Perfluorohexane-1-sulfonic acid and its salts (PFHxS)	--	--	0.01	ND
175	Benz[a]anthracene	200-280-6	56-55-3, 1718-53-2	0.01	ND
176	Cadmium carbonate**	208-168-9	513-78-0	0.01	ND
177	Cadmium hydroxide**	244-168-5	21041-95-2	0.01	ND
178	Cadmium nitrate**	233-710-6	10022-68-1, 10325-94-7	0.01	ND
179	Chrysene	205-923-4	218-01-9, 1719-03-5	0.01	ND
180	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]	---	---	0.01	ND
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 (4-HPbl)]	---	---	0.01	ND
182	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride (trimellitic anhydride; TMA)	209-008-0	552-30-7	0.01	ND
183	Dicyclohexyl phthalate (DCHP)	201-545-9	84-61-7	0.01	ND



No.	Test Items	EC No.	CAS No.	Detection Limit [%]	Result(s) [%]
184	Octamethylcyclotetrasiloxane (D4)	209-136-7	556-67-2	0.01	ND
185	Decamethylcyclopentasiloxane (D5)	208-764-9	541-02-6	0.01	ND
186	Dodecamethylcyclohexasiloxane (D6)	208-762-8	540-97-6	0.01	ND
187	Lead	231-100-4	7439-92-1	0.01	ND
188	Disodium octaborate**	234-541-0	12008-41-2	0.01	ND
189	Benzo[ghi]perylene	205-883-8	191-24-2	0.01	ND
190	Terphenyl hydrogenated	262-967-7	61788-32-7	0.01	ND
191	Ethylenediamine (EDA)	203-468-6	107-15-3	0.01	ND
192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	239-139-9	15087-24-8	0.01	ND
193	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	401-720-1	6807-17-6	0.01	ND
194	Benzo[k]fluoranthene	205-916-6	207-08-9	0.01	ND
195	Fluoranthene	205-912-4	206-44-0; 93951-69-0	0.01	ND
196	Phenanthrene	201-581-5	85-01-8	0.01	ND
197	Pyrene	204-927-3	129-00-0; 1718-52-1	0.01	ND
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)	---	---	0.01	ND
199	2-methoxyethyl acetate	203-772-9	110-49-6	0.01	ND
200	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	---	---	0.01	ND
201	4-tert-butylphenol	202-679-0	98-54-4	0.01	ND
202	Diisohexyl phthalate	276-090-2	71850-09-4	0.01	ND
203	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	404-360-3	119313-12-1	0.01	ND
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	400-600-6	71868-10-5	0.01	ND
205	Perfluorobutane sulfonic acid (PFBS) and its salts	---	---	0.01	ND



- Note: 1. Concentration in article of each SVHC should be less than 0.1% weight by weight (w/w) in the submitted sample(s)
2. Above result for the submitted sample is calculated based on relevant material testing data.
3. \*\* 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.
4. ## 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.
5. # only applicable with  $\geq 0.1\%$  of Michler's ketone (CAS No. 90-94-8) or Michler's base (CAS No. 101-61-1)
6. TGIC is a mixture and also contains  $\beta$ -TGIC. According to ECHA's technical dossier the ratio of  $\beta$ -TGIC to TGIC is around 1 to 10. Therefore  $\beta$ -TGIC is issued based on the above-mentioned ratio.
7. The analysis of 205 SVHC is 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](http://echa.europa.eu/chem_data/candidate_list_table_en.asp) for details.
8. 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:
- (a) The substance is present in those articles in quantities totalling over 1 tonne per producer or importer per year;
- (b) The substance is present in those articles above a concentration of 0.1% weight by weight (w/w).
9. 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.

Note: This report is for internal use only such as internal scientific research, education, quality control, product R&D.

-END OF THE TEST REPORT-