

시험결과 보고서

(SVHC Candidate list Test Report)

Report No. TBK-2020-10018

[시료명: 수성접착제 (WATER SOLUBLE ADHESIVE)]



KTR

한국화학융합시험연구원



요 약

성적서 번호 TBK-2020-10018

제목 SVHC Candidate list* Test Report

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* REACH European Chemicals Agency (ECHA) Regarding Regulation (EC) No. 1907/2006에 근거함.

1. 시험 결과

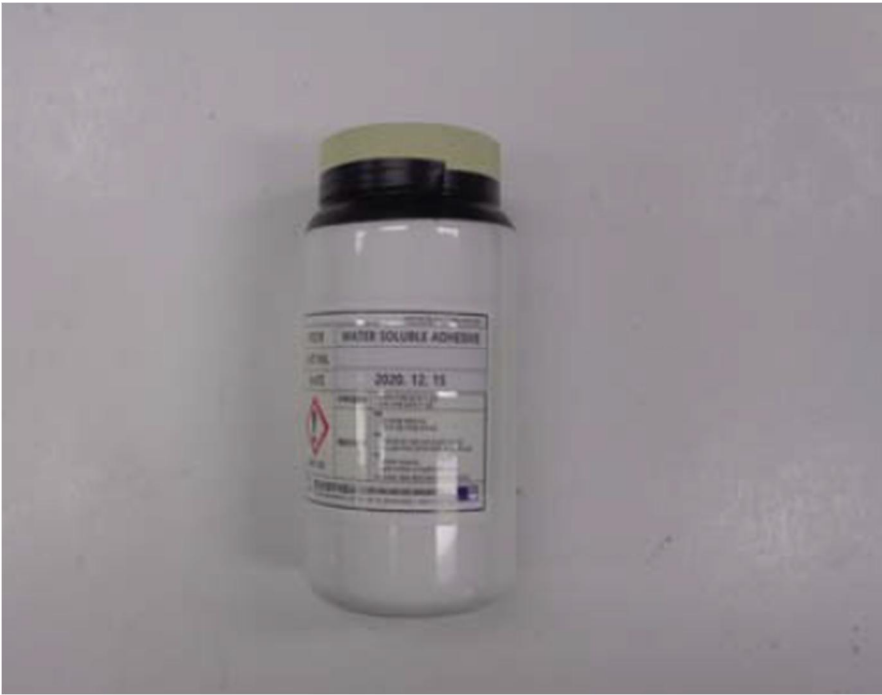
시료명 (부품명)	수성접착제 (WATER SOLUBLE ADHESIVE)
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시험 항목	시험 결과	검출된 항목의 결과*	비고**
SVHC candidate list 209종	검출안됨	-	검출안됨 (전체 항목)

* SVHC candidate list 중 검출된 항목(검출한계 초과)의 결과를 표기함. 표기되지 않은 결과는 '검출안됨' 임.

** '검출안됨'은 검출한계(Detection Limit) 이하의 결과임.

2. 시료 사진

사진	
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3. 세부 결과 (209종)

No.	항 목 명	CAS No.	EC No.	결과, %	검출 한계, %	SVHC 물질 정보
1	Triethyl arsenate*	15606-95-8	427-700-2	검출안됨	0.01	Carcinogenic
2	Anthracene	120-12-7	204-371-1	검출안됨	0.005	PBT
3	4,4'-Diaminodiphenyl methane (MDA)	101-77-9	202-974-4	검출안됨	0.005	Carcinogenic
4	Dibutyl phthalate (DBP)	84-74-2	201-557-4	검출안됨	0.005	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health
5	Cobalt dichloride*	7646-79-9	231-589-4	검출안됨	0.01	Carcinogenic
6	Diarsenic pentaoxide*	1303-28-2	215-116-9	검출안됨	0.01	Carcinogenic
7	Diarsenic trioxide*	1327-53-3	215-481-4	검출안됨	0.01	Carcinogenic
8	Sodium dichromate*	7789-12-0 ⁽¹⁾ , 10588-01-9 ⁽²⁾	234-190-3	검출안됨	0.01	Carcinogenic; Mutagenic; Toxic for reproduction
9	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	검출안됨	0.005	vPvB
10	Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	204-211-0	검출안됨	0.005	Toxic for reproduction; Equivalent level of concern having probable serious effects to environment and human health
11	Hexabromo cyclododecane (HBCDD) and all major diastereoisomers identified: α - HBCDD β - HBCDD γ - HBCDD	3194-55-6 ⁽³⁾ 25637-99-4 ⁽⁴⁾ 134237-50-6 134237-51-7 134237-52-8	247-148-4, 221-695-9	검출안됨	0.005	PBT
12	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (SCCP)	85535-84-8	287-476-5	검출안됨	0.01	PBT, vPvB
13	Bis(tributyltin)oxide (TBTO)**	56-35-9	200-268-0	검출안됨	0.005	PBT
14	Lead hydrogen arsenate*	7784-40-9	232-064-2	검출안됨	0.01	Carcinogenic; Toxic for reproduction
15	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7	검출안됨	0.005	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health
16	2,4-Dinitrotoluene	121-14-2	204-450-0	검출안됨	0.005	Carcinogenic
17	Anthracene oil	90640-80-5	292-602-7	검출안됨	0.01	Carcinogenic, PBT, vPvB
18	Anthracene oil, anthracene paste, distn. Lights	91995-17-4	295-278-5	검출안됨	0.01	Carcinogenic; Mutagenic, PBT, vPvB
19	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9	검출안됨	0.01	Carcinogenic; Mutagenic, PBT, vPvB
20	Anthracene oil, anthracene-low	90640-82-7	292-604-8	검출안됨	0.01	Carcinogenic; Mutagenic, PBT, vPvB

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21	Anthracene oil, anthracene paste	90640-81-6	292-603-2	검출안됨	0.01	Carcinogenic; Mutagenic, PBT, vPvB
22	Diisobutyl phthalate	84-69-5	201-553-2	검출안됨	0.005	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health
23	Aluminosilicate, Refractory Ceramic Fibres ^{*a}	Index no. 650-017-00-8		검출안됨	0.01	Carcinogenic
24	Zirconia Aluminosilicate, Refractory Ceramic Fibres ^{*b}	Index no. 650-017-00-8		검출안됨	0.01	Carcinogenic
25	Lead chromate*	7758-97-6	231-846-0	검출안됨	0.01	Carcinogenic; Toxic for reproduction
26	Lead chromate molybdate sulfate red (C.I. Pigment Red 104)*	12656-85-8	235-759-9	검출안됨	0.01	Carcinogenic; Toxic for reproduction
27	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	215-693-7	검출안됨	0.01	Carcinogenic; Toxic for reproduction
28	Tris(2-chloroethyl) phosphate	115-96-8	204-118-5	검출안됨	0.005	Toxic for reproduction
29	Coal tar pitch, high temperature	65996-93-2	266-028-2	검출안됨	0.01	Carcinogenic, PBT, vPvB
30	Acrylamide	79-06-1	201-173-7	검출안됨	0.005	Carcinogenic; Mutagenic
31	Trichloroethylene	79-01-6	201-167-4	검출안됨	0.005	Carcinogenic
32	Boric acid*	10043-35-3, 11113-50-1	233-139-2 / 234-343-4	검출안됨	0.01	Toxic for reproduction
33	Disodium tetraborate, anhydrous*	1330-43-4 ⁽⁵⁾ , 12179-04-3 ⁽⁶⁾ , 1303-96-4 ⁽⁷⁾	215-540-4	검출안됨	0.01	Toxic for reproduction
34	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	235-541-3	검출안됨	0.01	Toxic for reproduction
35	Sodium chromate*	7775-11-3	231-889-5	검출안됨	0.01	Carcinogenic; Mutagenic; Toxic for reproduction
36	Potassium chromate*	7789-00-6	232-140-5	검출안됨	0.01	Carcinogenic; Mutagenic
37	Ammonium dichromate*	7789-09-5	232-143-1	검출안됨	0.01	Carcinogenic; Mutagenic; Toxic for reproduction
38	Potassium dichromate*	7778-50-9	231-906-6	검출안됨	0.01	Carcinogenic; Mutagenic; Toxic for reproduction
39	Cobalt(II) sulphate*	10124-43-3	233-334-2	검출안됨	0.01	Carcinogenic; Toxic for reproduction
40	Cobalt(II) dinitrate*	10141-05-6	233-402-1	검출안됨	0.01	Carcinogenic; Toxic for reproduction
41	Cobalt(II) carbonate*	513-79-1	208-169-4	검출안됨	0.01	Carcinogenic; Toxic for reproduction
42	Cobalt(II) diacetate*	71-48-7	200-755-8	검출안됨	0.01	Carcinogenic; Toxic for reproduction
43	2-Methoxyethanol	109-86-4	203-713-7	검출안됨	0.005	Toxic for reproduction
44	2-Ethoxyethanol	110-80-5	203-804-1	검출안됨	0.005	Toxic for reproduction
45	Chromium trioxide*	1333-82-0	215-607-8	검출안됨	0.01	Carcinogenic; Mutagenic

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46	Acid generated from chromium trioxide and their oligomers: Chromic acid* Dichromic acid* Oligomers of chromic acid and dichromic acid*	7738-94-5 13530-68-2 -	231-801-5 236-881-5 -	검출안됨	0.01	Carcinogenic
47	2-Ethoxyethyl acetate	111-15-9	203-839-2	검출안됨	0.005	Toxic for reproduction
48	Strontium Chromate*	7789-06-2	232-142-6	검출안됨	0.01	Carcinogenic
49	1,2-benzenedicarboxylic acid, di-C7-11 branched alkyl ester and linear alkyl ester	68515-42-4	271-084-6	검출안됨	0.005	Toxic for reproduction
50	Hydrazine	302-01-2 7803-57-8	206-114-9	검출안됨	0.005	Carcinogenic
51	1-Methyl-2-pyrrolidone	872-50-4	212-828-1	검출안됨	0.005	Toxic for reproduction
52	1,2,3-trichloropropane	96-18-4	202-486-1	검출안됨	0.005	Toxic for reproduction
53	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl ester, C7-rich (DIHP)	71888-89-6	276-158-1	검출안됨	0.005	Toxic for reproduction
54	Dichromium tris(chromate)*	24613-89-6	246-356-2	검출안됨	0.01	Carcinogenic
55	Potassium hydroxyoctaoxodizincate di-chromate*	11103-86-9	234-329-8	검출안됨	0.01	Carcinogenic
56	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	검출안됨	0.01	Carcinogenic
57	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	500-036-1	검출안됨	0.005	Carcinogenic
58	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6	검출안됨	0.005	Toxic for reproduction
59	2-Methoxyaniline; o-Anisidine	90-04-0	201-963-1	검출안됨	0.005	Carcinogenic
60	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	205-426-2	검출안됨	0.005	Equivalent level of concern
61	1,2-Dichloroethane	107-06-2	203-458-1	검출안됨	0.005	Carcinogenic
62	Bis(2-methoxyethyl) ether	111-96-6	203-924-4	검출안됨	0.005	Toxic for reproduction
63	Arsenic acid*	7778-39-4	231-901-9	검출안됨	0.01	Carcinogenic
64	Calcium arsenate*	7778-44-1	231-904-5	검출안됨	0.01	Carcinogenic
65	Trilead diarsenate*	3687-31-8	222-979-5	검출안됨	0.01	Carcinogenic; Toxic for reproduction
66	N,N-dimethyl acetamide (DMAC)	127-19-5	204-826-4	검출안됨	0.005	Toxic for reproduction
67	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	202-918-9	검출안됨	0.005	Carcinogenic

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68	Phenolphthalein	77-09-8	201-004-7	검출안됨	0.005	Carcinogenic
69	Lead azide, Lead diazide*	13424-46-9	236-542-1	검출안됨	0.01	Toxic for reproduction
70	Lead styphnate*	15245-44-0	239-290-0	검출안됨	0.01	Toxic for reproduction
71	Lead dipicrate*	6477-64-1	229-335-2	검출안됨	0.01	Toxic for reproduction
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	203-977-3	검출안됨	0.005	Toxic for reproduction
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9	검출안됨	0.005	Toxic for reproduction
74	Diboron trioxide*	1303-86-2	215-125-8	검출안됨	0.01	Toxic for reproduction
75	Formamide	75-12-7	200-842-0	검출안됨	0.01	Toxic for reproduction
76	Lead(II) bis(methane sulfonate)*	17570-76-2	401-750-5	검출안됨	0.01	Toxic for reproduction
77	TGIC (1,3,5-tris(oxiranyl methyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione) §	2451-62-9	219-514-3	검출안됨	0.005	Mutagenic
78	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	423-400-0	검출안됨	0.005	Mutagenic
79	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	202-027-5	검출안됨	0.005	Carcinogenic
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2	검출안됨	0.005	Carcinogenic
81	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethyl ammonium chloride (C.I. Basic Violet 3)	548-62-9	208-953-6	검출안됨	0.005	Carcinogenic
82	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethyl ammonium chloride (C.I. Basic Blue 26)	2580-56-5	219-943-6	검출안됨	0.005	Carcinogenic
83	α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	229-851-8	검출안됨	0.01	Carcinogenic
84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	209-218-2	검출안됨	0.005	Carcinogenic

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85	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	214-604-9	검출안됨	0.005	Persistent, bioaccumulative and toxic; very persistent and very bioaccumulative
86	N,N-dimethyl formamide; dimethyl formamide	68-12-2	200-679-5	검출안됨	0.005	Toxic for reproduction
87	Methoxy acetic acid	625-45-6	210-894-6	검출안됨	0.005	Toxic for reproduction ; equivalent level of concern
88	Dibutyltin dichloride (DBT) ^{db}	683-18-1	211-670-0	검출안됨	0.01	Toxic for reproduction
89	1,2-Diethoxyethane	629-14-1	211-076-1	검출안됨	0.005	Toxic for reproduction
90	Hexahydro-2-benzofuran-1,3-dione (HHPA), cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	85-42-7, 13149-00-3, 14166-21-3	201-604-9, 236-086-3, 238-009-9	검출안됨	0.01	Equivalent level of concern
91	Hexahydromethyl phthalic 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	247-094-1, 243-072-0, 256-356-4, 260-566-1	검출안됨	0.01	Equivalent level of concern
92	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	-	-	검출안됨	0.005	Equivalent level of concern
93	Heptacosafuorotetradecanoic acid	376-06-7	206-803-4	검출안됨	0.005	Very persistent and very bioaccumulative
94	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear ⁺	84777-06-0	284-032-2	검출안됨	0.005	Toxic for reproduction
95	Henicosafuoroundecanoic acid	2058-94-8	218-165-4	검출안됨	0.005	Very persistent and very bioaccumulative
96	N-pentyl-isopentylphthalate (iPnPP) ⁺	776297-69-9	-	검출안됨	0.005	Toxic for reproduction
97	Pentacosafuorotridecanoic acid	72629-94-8	276-745-2	검출안됨	0.005	Very persistent and very bioaccumulative
98	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated - covering well-defined substances and UVCB substances, polymers and homologues	-	-	검출안됨	0.005	Equivalent level of concern
99	Tricosafuorododecanoic acid	307-55-1	206-203-2	검출안됨	0.005	Very persistent and very bioaccumulative
100	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	검출안됨	0.01	Toxic for reproduction

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101	Lead tetroxide (orange lead)*	1314-41-6	215-235-6	검출안됨	0.01	Toxic for reproduction
102	Diethyl sulphate	64-67-5	200-589-6	검출안됨	0.005	Carcinogenic; Mutagenic
103	Dinoseb	88-85-7	201-861-7	검출안됨	0.005	Toxic for reproduction
104	Lead Titanium Zirconium Oxide*	12626-81-2	235-727-4	검출안됨	0.01	Toxic for reproduction
105	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	검출안됨	0.01	Toxic for reproduction
106	Furan	110-00-9	203-727-3	검출안됨	0.01	Carcinogenic
107	N-methylacetamide	79-16-3	201-182-6	검출안됨	0.005	Toxic for reproduction
108	o-Toluidine; 2-Aminotoluene	95-53-4	202-429-0	검출안됨	0.005	Carcinogenic
109	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7	검출안됨	0.01	Toxic for reproduction
110	4,4'-oxydianiline and its salts	101-80-4	202-977-0	검출안됨	0.005	Carcinogenic; Mutagenic
111	[Phthalato(2-)]dioxotrilead (Dibasic lead phthalate)*	69011-06-9	273-688-5	검출안됨	0.01	Toxic for reproduction
112	Lead titanium trioxide*	12060-00-3	235-038-9	검출안됨	0.01	Toxic for reproduction
113	Lead oxide sulphate*	12036-76-9	234-853-7	검출안됨	0.01	Toxic for reproduction
114	Lead dinitrate*	10099-74-8	233-245-9	검출안됨	0.01	Toxic for reproduction
115	4-Aminoazobenzene; 4-Phenylazoaniline	60-09-3	200-453-6	검출안됨	0.005	Carcinogenic
116	Lead cyanamidate*	20837-86-9	244-073-9	검출안됨	0.01	Toxic for reproduction
117	Tetralead trioxide sulphate*	12202-17-4	235-380-9	검출안됨	0.01	Toxic for reproduction
118	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7	202-453-1	검출안됨	0.005	Carcinogenic
119	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	검출안됨	0.01	Toxic for reproduction
120	Trilead bis(carbonate)dihydroxide (basic lead carbonate)*	1319-46-6	215-290-6	검출안됨	0.01	Toxic for reproduction
121	Dimethyl sulphate	77-78-1	201-058-1	검출안됨	0.005	Carcinogenic
122	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	검출안됨	0.01	Toxic for reproduction
123	Silicic acid, barium salt, lead-doped*	68784-75-8	272-271-5	검출안됨	0.01	Toxic for reproduction
124	Biphenyl-4-ylamine	92-67-1	202-177-1	검출안됨	0.005	Carcinogenic
125	Lead oxide (lead monoxide)*	1317-36-8	215-267-0	검출안됨	0.01	Toxic for reproduction
126	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	검출안됨	0.01	Toxic for reproduction
127	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	200-879-2	검출안됨	0.01	Carcinogenic; Mutagenic
128	Silicic acid, lead salt*	11120-22-2	234-363-3	검출안됨	0.01	Toxic for reproduction
129	Trilead dioxide phosphonate*	12141-20-7	235-252-2	검출안됨	0.01	Toxic for reproduction
130	o-aminoazotoluene	97-56-3	202-591-2	검출안됨	0.005	Carcinogenic
131	1-bromopropane	106-94-5	203-445-0	검출안됨	0.01	Toxic for reproduction
132	6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1	검출안됨	0.005	Carcinogenic

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133	4,4'-methylenedi-o-toluidine	838-88-0	212-658-8	검출안됨	0.005	Carcinogenic
134	Tetraethyllead*	78-00-2	201-075-4	검출안됨	0.01	Toxic for reproduction
135	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	검출안됨	0.01	Toxic for reproduction
136	Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7	검출안됨	0.01	Toxic for reproduction
137	Diisopentylphthalate ⁺	605-50-5	210-088-4	검출안됨	0.005	Toxic for reproduction
138	Diazeno-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8	검출안됨	0.01	Equivalent level of concern
139	Cadmium*	7440-43-9	231-152-8	검출안됨	0.01	Carcinogenic; Equivalent level of concern
140	Cadmium oxide*	1306-19-0	215-146-2	검출안됨	0.01	Carcinogenic; Equivalent level of concern
141	Dipentyl phthalate (DPP) ⁺	131-18-0	205-017-9	검출안됨	0.005	Toxic for reproduction
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]	-	-	검출안됨	0.005	Equivalent level of concern
143	Ammonium pentadecafluorooctanoate (APFO) [‡]	3825-26-1	223-320-4	검출안됨	0.005	Toxic for reproduction; PBT
144	Pentadecafluorooctanoic acid (PFOA) [‡]	335-67-1	206-397-9	검출안됨	0.005	Toxic for reproduction; PBT
145	Cadmium sulphide*	1306-23-6	215-147-8	검출안됨	0.01	Carcinogenic; Equivalent level of concern
146	Dihexyl phthalate	84-75-3	201-559-5	검출안됨	0.005	Toxic for reproduction
147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	209-358-4	검출안됨	0.005	Carcinogenic
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)	1937-37-7	217-710-3	검출안됨	0.005	Carcinogenic
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	202-506-9	검출안됨	0.005	Toxic for reproduction
150	Lead di(acetate)*	301-04-2	206-104-4	검출안됨	0.01	Toxic for reproduction

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151	Trixylyl phosphate	25155-23-1	246-677-8	검출안됨	0.005	Toxic for reproduction
152	Cadmium chloride*	10108-64-2	233-296-7	검출안됨	0.01	Carcinogenic; Mutagenic; Toxic for Reproduction; Equivalent level of concern having probable serious effects to human health
153	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear ⁺⁺	68515-50-4	271-093-5	검출안됨	0.005	Toxic for reproduction
154	Sodium peroxometaborate*	7632-04-4	231-556-4	검출안됨	0.01	Toxic for reproduction
155	Sodium perborate; perboric acid, sodium salt*	-	239-172-9; 234-390-0	검출안됨	0.01	Toxic for reproduction
156	Cadmium fluoride *	7790-79-6	232-222-0	검출안됨	0.01	Carcinogenic; Mutagenic; Toxic for Reproduction; Equivalent level of concern having probable serious effects to human health
157	Cadmium sulphate *	10124-36-4; 31119-53-6	233-331-6	검출안됨	0.01	Carcinogenic; Mutagenic; Toxic for Reproduction; Equivalent level of concern having probable serious effects to human health
158	2-benzotriazol-2-yl-4,6- di-tert-butylphenol (UV- 320)	3846-71-7	223-346-6	검출안됨	0.005	PBT; vPvB
159	2-(2H-benzotriazol-2-yl)- 4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8	검출안됨	0.005	PBT; vPvB
160	2-ethylhexyl 10-ethyl- 4,4-dioctyl-7-oxo-8-oxa- 3,5-dithia-4- stannatetradecanoate (DOTE) ^{db}	15571-58-1	239-622-4	검출안됨	0.01	Toxic for Reproduction

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) ^{ph}	-	-	검출안됨	0.01	Toxic for Reproduction
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	검출안됨	0.01	Toxic for reproduction
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]	-	-	검출안됨	0.01	vPvB
164	1,3-propanesultone	1120-71-4	214-317-9	검출안됨	0.005	Carcinogenic
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8	검출안됨	0.005	vPvB
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1	검출안됨	0.005	vPvB
167	Nitrobenzene	98-95-3	202-716-0	검출안됨	0.005	Toxic for reproduction
168	Perfluorononan-1-oic acid and its sodium and ammonium salts	375-95-1; 21049-39-8; 4149-60-4	206-801-3	검출안됨	0.005	Toxic for reproduction; PBT
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5	검출안됨	0.005	Carcinogenic; Mutagenic; Toxic for Reproduction; PBT; vPvB
170	4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	201-245-8	검출안됨	0.005	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health

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171	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] (4-Hpbl)	-	-	검출안됨	0.005	Equivalent level of concern having probable serious effects to the environment
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3830-45-3, 335-76-2, 3108-42-7	-, 206-400-3, 221-470-5	검출안됨	0.005	Toxic for reproduction; PBT
173	p-(1,1-dimethylpropyl)phenol (PTAP)	80-46-6	201-280-9	검출안됨	0.005	Equivalent level of concern having probable serious effects to the environment
174	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	-	-	검출안됨	0.005	vPvB
175	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 synisomers or any combination thereof]	-	-	검출안됨	0.005	vPvB (Article 57e)
176	Benz[a]anthracene	56-55-3	200-280-6	검출안됨	0.005	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
177	Cadmium nitrate	10325-94-7	233-710-6	검출안됨	0.005	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) -human health)
178	Cadmium carbonate	513-78-0	208-168-9	검출안됨	0.005	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) -human health)
179	Cadmium hydroxide	21041-95-2	244-168-5	검출안됨	0.005	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) -human health)
180	Chrysene	218-01-9	205-923-4	검출안됨	0.005	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RPHP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	-	-	검출안됨	0.005	Endocrine disrupting properties (Article 57(f) – environment)

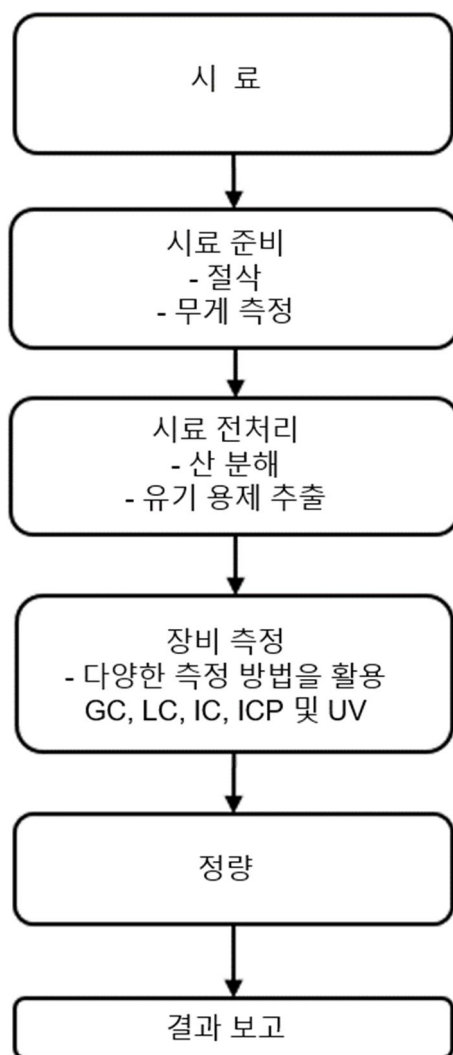
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182	Octamethylcyclotetrasiloxane (D4)	556-67-2	209-136-7	검출안됨	0.005	PBT; vPvB
183	Decamethylcyclopentasiloxane (D5)	541-02-6	208-764-9	검출안됨	0.005	PBT; vPvB
184	Dodecamethylcyclohexasiloxane (D6)	540-97-6	208-762-8	검출안됨	0.005	PBT; vPvB
185	Lead	7439-92-1	231-100-4	검출안됨	0.005	Toxic for reproduction
186	Disodium octaborate	12008-41-2	234-541-0	검출안됨	0.005	Toxic for reproduction
187	Benzo[ghi]perylene	191-24-2	205-883-8	검출안됨	0.005	PBT; vPvB
188	Terphenyl hydrogenated	61788-32-7	262-967-7	검출안됨	0.005	vPvB
189	Ethylenediamine (EDA)	107-15-3	203-468-6	검출안됨	0.005	Equivalent level of concern having probable serious effects to human health
190	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (TMA)	552-30-7	209-008-0	검출안됨	0.005	Equivalent level of concern having probable serious effects to human health
191	Dicyclohexyl phthalate (DCHP)	84-61-7	201-545-9	검출안됨	0.005	Toxic for reproduction; Equivalent level of concern having probable serious effects to human health
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	207-08-9	205-916-6	검출안됨	0.005	Toxic for reproduction
193	Benzo[k]fluoranthene	206-44-0	205-912-4	검출안됨	0.005	Carcinogenic; PBT; vPvB
194	Fluoranthene	85-01-8	201-581-5	검출안됨	0.005	PBT; vPvB
195	Phenanthrene	129-00-0	204-927-3	검출안됨	0.005	vPvB
196	Pyrene	15087-24-8	239-139-9	검출안됨	0.005	PBT; vPvB
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo [2.2.1]heptan-2-one(3-benzylidenecamphor; 3-BC)	207-08-9	205-916-6	검출안됨	0.005	Equivalent level of concern having probable serious effects to the environment
198	2-methoxyethyl acetate	110-49-6	203-772-9	검출안됨	0.005	Toxic for reproduction
199	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	-	-	검출안됨	0.005	Equivalent level of concern having probable serious effects to the environment
200	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	-	검출안됨	0.005	Equivalent level of concern having probable serious effects on the environment & human health
201	4-tert-butylphenol (PTBP)	98-54-4	202-679-0	검출안됨	0.005	Equivalent level of concern having probable serious effects to the environment

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202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	404-360-3	검출안됨	0.005	Toxic for reproduction
203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	400-600-6	검출안됨	0.005	Toxic for reproduction
204	Diisohexyl phthalate	71850-09-4	276-090-2	검출안됨	0.005	Toxic for reproduction
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	-	검출안됨	0.005	Equivalent level of concern having probable serious effects on the environment and human health
206	1-vinylimidazole	1072-63-5	214-012-0	검출안됨	0.005	Toxic for reproduction
207	2-methylimidazole	693-98-1	211-765-7	검출안됨	0.005	Toxic for reproduction
208	Butyl 4-hydroxybenzoate (Butylparaben)	94-26-8	202-318-7	검출안됨	0.005	Equivalent level of concern having probable serious effects on the human health
209	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	245-152-0	검출안됨	0.010	Toxic for reproduction

4. 시험 절차



5. 시험 정보

- (1) CAS no. 7789-12-0 refers to sodium dichromate dihydrate
- (2) CAS no. 10588-01-9 refers to anhydrous sodium dichromate
- (3) CAS no. 3194-55-6 refers to a specific HBCDD - 1,2,5,6,9,10-hexabromocyclododecane
- (4) CAS no. 25637-99-4 refers to unspecific HBCDD isomer composition
- (5) CAS no. 1330-43-4 refers to disodium tetraborate, anhydrous
- (6) CAS no. 12179-04-3 refers to sodium tetraborate, pentahydrate
- (7) CAS no. 1303-96-4 refers to sodium tetraborate, decahydrate

시험방법: GC, LC, IC, ICP 및 UV 등 다양한 측정 방법을 활용한 측정

1. In-house Method*

* Developed method by Bureau Veritas

외부기관의 결과값을 바탕으로 작성됨 . (Bureau Veritas (BV HK) (8220)507-0032-001)

비고:

1. PBT = Persistent, bio accumulative and toxic as defined in Regulation (EC) No 1907/2006
2. vPvB = Very persistent and very bio accumulative as defined in Regulation (EC) No 1907/2006
3. *Result is based on the heavy metal or inorganic element concentration. 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. **Result is identified by tributyltin (TBT). 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.
5. [§]TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione) and β -TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione) are reported as a mixture.
6. [¶]Refer to Aluminosilicate, Refractory Ceramic Fibres 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 (μ m) c) alkaline oxide and alkali earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content less or equal to 18% by weight.
7. ^bRefer to Zirconia Aluminosilicate, Refractory Ceramic Fibres 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 (μ m). c) alkaline oxide and alkali earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content less or equal to 18% by weight.
8. [†][1,2-Benzenedicarboxylic acid, dipentylester, branched and linear] is a mixture of phthalates contains DPP, DIPP and N-pentyl-isopentylphthalate.
9. [‡]PFOA and APFO are reported together. The result is based on PFOA concentration. 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.
10. ^{††}[1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear] is a mixture of phthalates contains dihexyl phthalate.
11. [¶]Result is based on the tin metal concentration, and further confirmation for checking DBT, DOTE & MOTE concentration.

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참고:

1. The limit of 0.1% (w/w) applies to an article. The results were calculated assuming as the submitted sample was an article. However, the results may not be applicable if the intended use of the sample is a substance or mixture. According to REACH, definition of an article, substance and mixture are:
 - i. Article - An object during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition
 - ii. Substance - A chemical element and its compound in the natural state or obtained by any manufacturing process
 - iii. Mixture (Previously known as "Preparation") - A mixture or solution composed of two or more substances
2. In accordance of Article 7 of Regulation (EC) No. 1907/2006 (REACH regulation) – Registration and notification of substances in articles, any producer or importer of articles shall notify ECHA, if a substance meets in criteria in Article 57 and is identified in accordance with Article 59(1), if both (1) the substance is present in those articles in quantities totalling over 1 tonne per producer or importer per year & (2) the substance is present in those articles above a concentration of 0.1% weight by weight (w/w) are met. The information to be notified shall include (a) identity and contact details of the producer or importer, (b) the registration numbers, (c) the identity of the substance and (d) the classification of the substance, (e) a brief description of the use of the substance and (f) the tonnage range of the substance.
3. In accordance of Article 33 of Regulation (EC) No. 1907/2006 (REACH regulation) – Duty to communicate information on substances in articles, any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance. On request by a consumer the relevant information shall be provided by any supplier of an article free of charge, within 45 days of receipt of the request.

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