



Test Report No. 64.168.24.60081.02B
Rev.00
Dated 2024-04-18

Applicant: Pylon Technologies Co., Ltd.

Address: 5/F, No.71-72, Lane 887, Zu Chongzhi Road, China(Shanghai) Pilot Free Trade Zone

Sample Description: Rechargeable Li-ion Battery excluding cell, Battery Controller

Model No.: Force-H3(FC1000+FC1000-US+FH10050+FH10050-US)

Sample Receive Date: 2024-02-04, 2024-04-03, 2024-04-07

Test Period: From 2024-02-04 to 2024-04-16, 2024-04-03 to 2024-04-10, 2024-04-07 to 2024-04-16

Purpose of examination: REACH Regulation (EC) No. 1907/2006
- 240 Substances of Very High Concern (SVHC) analysis based on the Candidate List published by the European Chemicals Agency (ECHA)

Test Result: Refer to following page(s)

Summary: According to the specified scope and analytical techniques, the concentration of Lead, cadmium are >0.1% (w/w) in certain component(s), the concentration of each other SVHCs is <0.1% (w/w) in the component(s) of submitted product(s).

Remark: The result relates only to the items tested.

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
TÜV SÜD Group

Prepared by:

Judy Tan
Project Handler



Reviewed by:

Ben Shao
Designated Reviewer

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

Disclaimer Measurement Uncertainty: Unless otherwise agreed upon, pass or fail verdicts are given based on the measured values without consideration 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 or fail.







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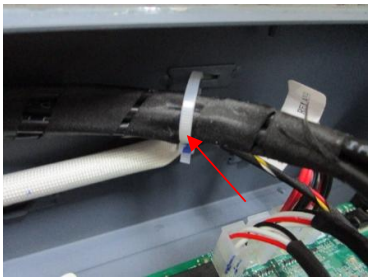

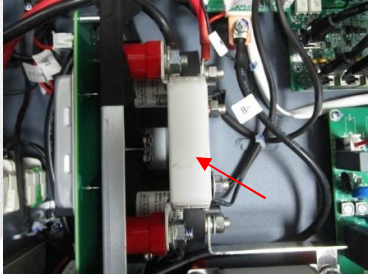
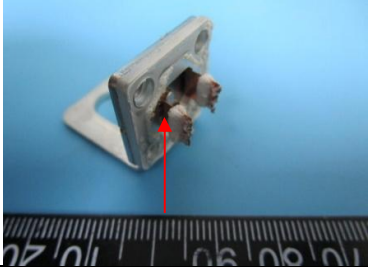

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1. TESTED SUBJECT DESCRIPTION

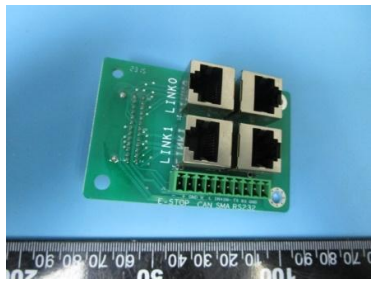
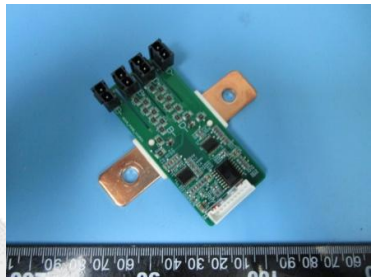

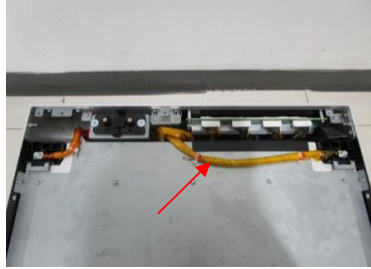
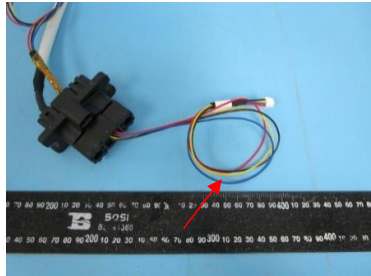
Sample Number	Tested Material Description	Photo	
001	Metal parts		
002	Silvery plastic black/red/yellow printed sticker		
003	Transparent adhesive plastic black/silvery/white printed sheet		
004	White adhesive plastic sheet		
005	Green/silvery plastic tape		
006	Transparent plastic sheet with white film		
007	Black adhesive plastic sheet		
008	White/yellow PCB tape		
009	Transparent plastic button with black adhesive sheet		
010	Black plastic sheet		
011	Metal parts		
012	Transparent grey plastic cover		
013	Grey plastic knob		
014	Black soft plastic ring		
015	Golden metal part		
016	White plastic frame		
017	White plastic case		
018	Green plastic knob		
019	Black plastic part		
020	Green plastic part		
021	White plastic part		
022	White plastic pin		
023	White paper sheet		
024	Red plastic part		
025	White plastic part		
026	White plastic holder		
027	White plastic part		

Sample Number	Tested Material Description	Photo
028	Black soft plastic wire jacket (STYLE)	
029	White plastic sleeve	
030	White plastic black printed sticker	
031	Black soft plastic heating shrinkable tube	
032	Black soft plastic wire jacket (SHENGPAL SILICONE)	
033	White plastic socket	
034	Red soft plastic wire jacket (STYLE)	
035	Red soft plastic heating shrinkable tube	
036	Red soft plastic wire jacket (SHENGPAL SILICONE)	
037	Black adhesive fabric tape	
038	Black plastic pin	
039	Black soft plastic wire jacket	
040	Transparent soft plastic wire jacket	
041	Black soft plastic ring	
042	White plastic part	
043	Golden metal pin	
044	Golden metal pin inner	
045	Blue soft plastic ring	
046	Black soft plastic part	
047	Black plastic cover	
048	Black soft plastic part	
*049	White plastic shell	
050	Black plastic holder	
051	Green PCB	
052	Black plastic socket	
053	White soft plastic washer	
054	Black plastic nut	
055	Translucent soft plastic ring	
056	Red plastic button	
057	Black plastic shell	
058	Golden metal nut	
059	Green plastic base with glue	
060	Copper/silvery metal contact point	
061	White plastic part	
062	Translucent plastic part	
063	Black soft plastic wire jacket (JINGFENG-SH)	
064	White soft plastic wire jacket	
065	Red soft plastic wire jacket	
066	Yellow soft plastic wire jacket	

Sample Number	Tested Material Description	Photo
067	Black plastic part	
068	Black soft plastic part	
069	Red soft plastic ring	
070	Metal parts	
071	Black adhesive plastic ring	
072	Translucent glue	
073	Black plastic port	
074	Black plastic part	
075	Blue soft plastic wire jacket (Fu long Rui xing)	
076	Red soft plastic wire jacket	
077	Yellow soft plastic wire jacket	
078	Black soft plastic wire jacket	
079	Translucent plastic socket	
080	Black soft plastic cable jacket (DATA CABLE CAT)	
081	Metal parts	
082	Transparent plastic socket	
083	Black soft plastic part	
084	Brown soft plastic wire jacket	
085	Brown/white soft plastic wire jacket	
086	Blue soft plastic wire jacket	
087	Blue/white soft plastic wire jacket	
088	Green soft plastic wire jacket	
089	Green/white soft plastic wire jacket	
090	Orange soft plastic wire jacket	
091	Orange/white soft plastic wire jacket	
092	Black plastic socket	



Sample Number	Tested Material Description	Photo
093	White plastic tie	
094	Red plastic part	
095	Golden metal part	
096	White ceramic black printed shell	
097	White powder inner	
098	White glue	
099	Black plastic shell	
100	Metal parts	
101	Black glue	
102	Black plastic cover	
103	Green PCB with electronic components	
104	Black printed white body (SMD capacity)	
105	White soft plastic wire jacket (IRONFLONG)	
106	Red soft plastic wire jacket	
107	Black soft plastic wire jacket	

Sample Number	Tested Material Description	Photo	
108	Black glue		
109	Black plastic shell		
110	Red soft plastic wire jacket (YITONG)		
111	Black soft plastic wire jacket		
112	Metal parts		
113	Black soft plastic wire jacket (JINGFENG-SH)		
114	Red soft plastic wire jacket		
115	White fiber glass tube		
116	Black plastic port		
117	White plastic port		
118	Bright black plastic body		
119	Black printed white body (SMD capacity)		
120	Black plastic holder		
121	Silvery/Copper metal plate with solder		
122	Black plastic port		
123	Blue plastic white printed sleeve (Capacitor)		
124	Black soft plastic holder		
125	Translucent plastic port		
126	Black plastic clip		
127	White plastic port		
128	Black plastic shell (Buzzle)		
129	Black glue base with green PCB		
130	Green PCB with electronic components		
131	Metal parts		
132	Electronic components		
133	Black body white printed (General diode)		
134	Silvery/Copper metal with solder		
135	Silvery/Copper metal plate with solder		
136	Yellow plastic sheet		
137	Black plastic base		
138	Electronic components		
139	Black plastic shell (Relay)		

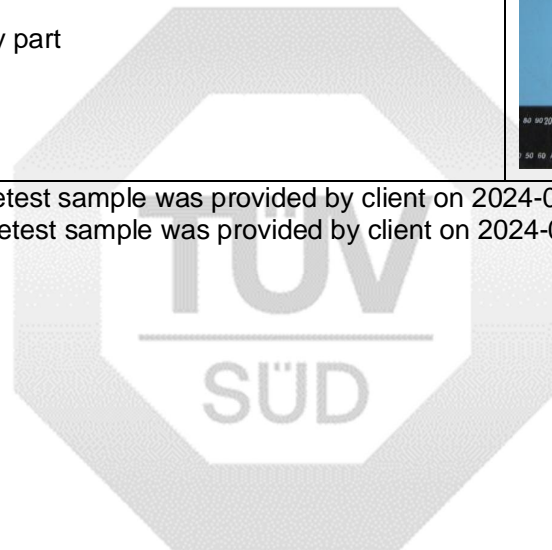
Sample Number	Tested Material Description	Photo
140	Green plastic part	
141	Electronic components	
142	White plastic part	
143	White plastic base	
144	Black plastic base	
145	Yellow plastic LED	
146	Black plastic holder	
147	Green plastic LED	
148	Black PCB Electronic components	
149	Yellow adhesive plastic tape	
150	Blue soft plastic wire jacket (JINGFENG-SH)	

Sample Number	Tested Material Description	Photo
151	White ceramic black printed shell	
152	White sand inner	
153	Blue soft plastic sheet	
154	Black plastic white printed sleeve (Capacitor)	
**155	Golden metal cap	
156	Green PCB with electronic components	
157	Black printed white body (SMD capacity)	
158	Black adhesive foam sheet	
159	Black adhesive plastic sheet	
160	Black plastic frame	
161	Silvery mica foil	
162	White adhesive plastic sheet	

Sample Number	Tested Material Description	Photo
163	Grey paper sheet	
164	Black glue	
165	Black soft plastic wire jacket	
166	Green PCB with electronic components	
167	Metal parts	
168	Black plastic part	
169	Metal parts	

Sample Number	Tested Material Description	Photo
170	Battery part	
171	Battery part	

Remark: * means the retest sample was provided by client on 2024-04-03.
 ** means the retest sample was provided by client on 2024-04-07.



2. TEST RESULTS

Test method: Screening test. [Reporting limit: 0.010%]

For organic substance(s) analysis, extracted by organic solvent, followed by using Liquid Chromatography with Tandem Mass Spectrometry Detection (LC-MS/MS), Gas Chromatography and Mass Spectrometry (GC-MS), headspace GC-MS, High Performance Liquid Chromatography-Diode Array Detection (HPLC-DAD) and Gas chromatograph and mass selective detector with chemical ionization (GC-ECNI-MS);

For heavy metal(s) analysis, digested by acid, followed by using Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES), Atomic Absorption Spectrometry (AAS) and Ultraviolet-visible spectrophotometer (UV-Vis).

Test Item(s)	Result [%]	
	Sample 001	Sample 002+003+004+005+006+007+009+010+012+013
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 008+051+103+129+130+148+156+166	Sample 011
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 016+017+018+019+020+021+022+023+024+025	Sample 028+032+034+036+039+040+084+085+086+087
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 029+033+037+038+042+047+050+054+056+057	Sample 031+055+068+069+083+153+165
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Note:

- “%” denotes percent by weight
- “<” denotes less than
- “*” refer to APPENDIX I for detailed list of SVHCs



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Test Item(s)	Result [%]	
	Sample 049 δ	Sample 059+061+062+067+071 +073+074+079+082+092
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 070	Sample 072+097+098+101+108 +152+158+163+164
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 081	Sample 088+089+090+091+105 +106+107+110+111+150
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 093+094+099+102+109 +115+149+159+160+161	Sample 096+151
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 100	Sample 112
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Note:

- “%” denotes percent by weight
- “<” denotes less than
- “*” refer to APPENDIX I for detailed list of SVHCs
- δ means the retest result.

(Continued)

Test Item(s)	Result [%]	
	Sample 116+117+118+120+122 +123+124+125+126+127	Sample 128+136+137+139+143 +144+145+147+154
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 131	Sample 132+138+141
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]	
	Sample 162+168	Sample 167
Each of 240 substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]
	Sample 169
Each of 240 substances of very high concern (SVHCs)*	< 0.01

Test Item(s)	Result [%]
	Sample 014+041+045+046+048+053
Dodecamethylcyclohexasiloxane (D6) (CAS No. 540-97-6)	0.01
Other substances of very high concern (SVHCs)*	< 0.01

Note:

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- “*” refer to APPENDIX I for detailed list of SVHCs



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Test Item(s)	Result [%]	
	Sample 026+027	Sample 052+140+142+146
Melamine (CAS No. 108-78-1)	0.04	0.01
Other substances of very high concern (SVHCs)*	< 0.01	< 0.01

Test Item(s)	Result [%]		
	Sample 030	Sample 035	Sample 075+076+077+078+080
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (SCCP) (CAS No. 85535-84-8)	0.09	0.05	0.01
Medium-chain chlorinated paraffins (MCCP)	0.08	< 0.01	< 0.01
Other substances of very high concern (SVHCs)*	< 0.01	< 0.01	< 0.01

Test Item(s)	Result [%]			
	Sample 063	Sample 064	Sample 065+066	Sample 113+114
Dibutyl phthalate (DBP) (CAS No. 84-74-2)	0.02	0.03	0.02	0.01
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (SCCP) (CAS No. 85535-84-8)	0.02	0.03	< 0.01	< 0.01
Other substances of very high concern (SVHCs)*	< 0.01	< 0.01	< 0.01	< 0.01

Note:

- “%” denotes percent by weight
- “<” denotes less than
- “*” refer to APPENDIX I for detailed list of SVHCs



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Test Item(s)	Result [%]				
	Sample 015	Sample 043	Sample 044	Sample 058	Sample 060
Lead (CAS No. 7439-92-1)	2.75	2.75	2.47	2.08	< 0.01
Cadmium (CAS No. 7440-43-9)	< 0.01	< 0.01	< 0.01	< 0.01	0.87
Other substances of very high concern (SVHCs)*	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Test Item(s)	Result [%]				
	Sample 095	Sample 104	Sample 119	Sample 121	Sample 133
Lead (CAS No. 7439-92-1)	2.47	0.12	0.09	0.91	0.02
Other substances of very high concern (SVHCs)*	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Test Item(s)	Result [%]			
	Sample 134	Sample 135	Sample 155 δ	Sample 157
Lead (CAS No. 7439-92-1)	2.53	4.37	< 0.01	0.15
Other substances of very high concern (SVHCs)*	< 0.01	< 0.01	< 0.01	< 0.01

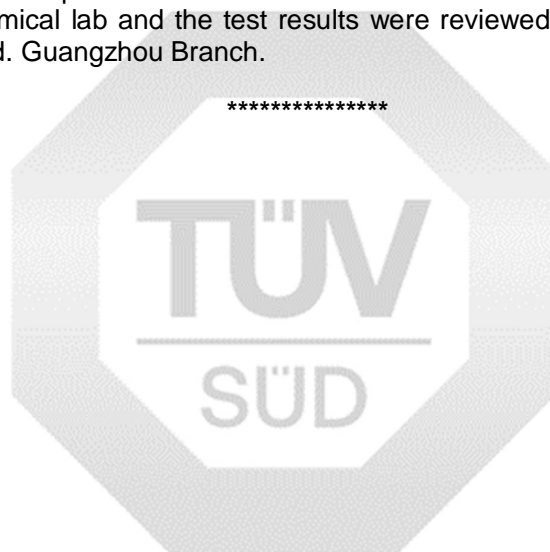
Test Item(s)	Result [%]	
	Sample 170	Sample 171
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) (CAS No.110-71-4)	0.05	< 0.01
Dibutyl phthalate (DBP) (CAS No. 84-74-2)	< 0.01	0.02
1-Methyl-2-pyrrolidone (NMP) (CAS No. 872-50-4)	< 0.01	0.03
Other substances of very high concern (SVHCs)*	< 0.01	< 0.01

Note:

- “%” denotes percent by weight
- “<” denotes less than
- “*” refer to APPENDIX I for detailed list of SVHCs
- As per article 33 of the REACH regulation (EC No. 1907/2006), recipients of article must be provided with information of safe use if any of the tested substances exceeded 0.1% (w/w).
- δ means the retest result.

3. REMARK

The chemical testing was performed in TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Chemical lab and the test results were reviewed at TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch.



APPENDIX I - 240 SUBSTANCES OF VERY HIGH CONCERN (SVHCs)

1. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN OCTOBER 2008 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
1	Anthracene	120-12-7	204-371-1
2	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	202-974-4
3	Dibutyl phthalate (DBP)	84-74-2	201-557-4
4	Cobalt dichloride*	7646-79-9	231-589-4
5	Diarsenic pentaoxide*	1303-28-2	215-116-9
6	Diarsenic trioxide*	1327-53-3	215-481-4
7	Sodium dichromate*	7789-12-0 and 10588-01-9	234-190-3
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4
9	Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	204-211-0
10	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-HBCDD, Beta- HBCDD, Gamma-HBCDD	25637-99-4 and 3194-55-6 (134237-50-6, 134237-51-7, 134237-52-8)	247-148-4 and 221-695-9
11	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (SCCP)	85535-84-8	287-476-5
12	Bis(tributyltin)oxide (TBTO)*	56-35-9	200-268-0
13	Lead hydrogen arsenate*	7784-40-9	232-064-2
14	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7
15	Triethyl arsenate*	15606-95-8	427-700-2

2. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2010 AND MARCH 2010 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
16	Anthracene oil [#]	90640-80-5	292-602-7
17	Anthracene oil, anthracene paste, distn. lights [#]	91995-17-4	295-278-5
18	Anthracene oil, anthracene paste, anthracene fraction [#]	91995-15-2	295-275-9
19	Anthracene oil, anthracene-low [#]	90640-82-7	292-604-8
20	Anthracene oil, anthracene paste [#]	90640-81-6	292-603-2
21	Pitch, coal tar, high temp [#]	65996-93-2	266-028-2
22	2,4-Dinitrotoluene	121-14-2	204-450-0
23	Diisobutyl phthalate (DIBP)	84-69-5	201-553-2
24	Tris(2-chloroethyl)phosphate	115-96-8	204-118-5
25	Lead chromate*	7758-97-6	231-846-0
26	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	215-693-7
27	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)*	12656-85-8	235-759-9
28	Acrylamide	79-06-1	201-173-7

3. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2010 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
29	Trichloroethylene	79-01-6	201-167-4
30	Boric acid*	10043-35-3 11113-50-1	233-139-2 234-343-4
31	Disodium tetraborate, anhydrous*	1330-43-4 12179-04-3 1303-96-4	215-540-4
32	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	235-541-3
33	Sodium chromate*	7775-11-3	231-889-5
34	Potassium chromate*	7789-00-6	232-140-5
35	Ammonium dichromate*	7789-9-5	232-143-1
36	Potassium dichromate*	7778-50-9	231-906-6

4. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2010 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
37	Cobalt(II) sulphate*	10124-43-3	233-334-2
38	Cobalt(II) dinitrate*	10141-05-6	233-402-1
39	Cobalt(II) carbonate*	513-79-1	208-169-4
40	Cobalt(II) diacetate*	71-48-7	200-755-8
41	2-Methoxyethanol	109-86-4	203-713-7
42	2-Ethoxyethanol	110-80-5	203-804-1
43	Chromium trioxide*	1333-82-0	215-607-8
44	Acids generated from chromium trioxide and their oligomers*	7738-94-5 13530-68-2 not yet assigned	231-801-5 236-881-5 not yet assigned

5. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2011 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
45	2-Ethoxyethyl acetate (2-EEA)	111-15-9	203-839-2
46	Strontium chromate*	7789-06-2	232-142-6
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)#	68515-42-4	271-084-6
48	Hydrazine	7803-57-8, 302-01-2	206-114-9
49	1-Methyl-2-pyrrolidone	872-50-4	212-828-1
50	1,2,3-Trichloropropane	96-18-4	202-486-1
51	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	276-158-1

6. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2011 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
52	1,2-Dichloroethane	107-06-2	203-458-1
53	2,2'-Dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	202-918-9
54	2-Methoxyaniline, o-Anisidine	90-04-0	201-963-1
55	4-(1,1,3,3-Tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	205-426-2
56	Aluminosilicate Refractory Ceramic Fibres (RCF)	--	---
57	Arsenic acid*	7778-39-4	231-901-9
58	Bis(2-methoxyethyl) ether	111-96-6	203-924-4
59	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6
60	Calcium arsenate*	7778-44-1	231-904-5
61	Dichromium tris(chromate) *	24613-89-6	246-356-2
62	Formaldehyde, oligomeric reaction products with aniline (technical MDA) #	25214-70-4	500-036-1
63	Lead diazide*	13424-46-9	236-542-1
64	Lead dipicrate*	6477-64-1	229-335-2
65	Lead styphnate*	15245-44-0	239-290-0
66	N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4
67	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0
68	Phenolphthalein	77-09-8	201-004-7
69	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8
70	Trilead diarsenate*	3687-31-8	222-979-5
71	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) *	--	---

7. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2012 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	203-977-3
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9
74	Diboron trioxide*	1303-86-2	215-125-8
75	Formamide	75-12-7	200-842-0
76	Lead(II) bis(methanesulfonate)*	17570-76-2	401-750-5
77	1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (TGIC)	2451-62-9	219-514-3
78	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	423-400-0
79	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	202-027-5
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2
81	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	2580-56-5	219-943-6
82	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	548-62-9	208-953-6
83	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	561-41-1	209-218-2
84	α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	6786-83-0	229-851-8

8. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2012 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
85	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	214-604-9
86	Pentacosfluorotridecanoic acid	72629-94-8	276-745-2
87	Tricosfluorododecanoic acid	307-55-1	206-203-2
88	Henicosfluoroundecanoic acid	2058-94-8	218-165-4
89	Heptacosfluorotetradecanoic acid	376-06-7	206-803-4
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated#	-	-
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#	-	-
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8
93	Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA)	85-42-7	
94	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260-566-1
95	Methoxy acetic acid	625-45-6	210-894-6
96	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2
97	Diisopentylphthalate (DIPP)	605-50-5	210-088-4
98	N-pentyl-isopentylphthalate	776297-69-9	-
99	1,2-Diethoxyethane	629-14-1	211-076-1
100	N,N-dimethylformamide; dimethyl formamide	68-12-2	200-679-5
101	Dibutyltin dichloride (DBT)	683-18-1	211-670-0
102	Acetic acid, lead salt, basic*	51404-69-4	257-175-3
103	Basic lead carbonate (trilead bis(carbonate)dihydroxide)*	1319-46-6	215-290-6
104	Lead oxide sulfate (basic lead sulfate)*	12036-76-9	234-853-7
105	[Phthalato(2-)]dioxotrilead (dibasic lead phthalate)*	69011-06-9	273-688-5
106	Dioxobis(stearato)trilead*	12578-12-0	235-702-8
107	Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7
108	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0
109	Lead cyanamidate*	20837-86-9	244-073-9
110	Lead dinitrate*	10099-74-8	233-245-9
111	Lead oxide (lead monoxide)*	1317-36-8	215-267-0
112	Lead tetroxide (orange lead)*	1314-41-6	215-235-6
113	Lead titanium trioxide*	12060-00-3	235-038-9
114	Lead Titanium Zirconium Oxide*	12626-81-2	235-727-4

No.	Substance Name	CAS NO.	EC NO.
115	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7
116	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1
117	Silicic acid, barium salt, lead-doped*	68784-75-8	272-271-5
118	Silicic acid, lead salt*	11120-22-2	234-363-3
119	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1
120	Tetraethyllead*	78-00-2	201-075-4
121	Tetralead trioxide sulphate*	12202-17-4	235-380-9
122	Trilead dioxide phosphonate*	12141-20-7	235-252-2
123	Furan	110-00-9	203-727-3
124	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	200-879-2
125	Diethyl sulphate	64-67-5	200-589-6
126	Dimethyl sulphate	77-78-1	201-058-1
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7
128	Dinoseb	88-85-7	201-861-7
129	4,4'-methylenedi-o-toluidine	838-88-0	212-658-8
130	4,4'-oxydianiline and its salts	101-80-4	202-977-0
131	4-Aminoazobenzene; 4-Phenylazoaniline	60-09-3	200-453-6
132	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7	202-453-1
133	6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1
134	Biphenyl-4-ylamine	92-67-1	202-177-1
135	o-aminoazotoluene	97-56-3	202-591-2
136	o-Toluidine; 2-Aminotoluene	95-53-4	202-429-0
137	N-methylacetamide	79-16-3	201-182-6
138	1-bromopropane; n-propyl bromide	106-94-5	203-445-0

9. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2013 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
139	Cadmium	7440-43-9	231-152-8
140	Cadmium oxide*	1306-19-0	215-146-2
141	Dipentyl phthalate (DPP)	131-18-0	205-017-9
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]	-	-
143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4
144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-379-9

10. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2013 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
145	Cadmium sulphide*	1306-23-6	215-147-8
146	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
147	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	217-710-3
148	Dihexyl phthalate	84-75-3	201-559-5
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	202-506-9
150	Lead di (acetate)	301-04-2	206-104-4
151	Trixylyl phosphate	25155-23-1	246-677-8

11. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2014 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5
153	Cadmium chloride*	10108-64-2	233-296-7
154	Sodium perborate, perboric acid, sodium salt*	--	239-172-9, 234-390-0
155	Sodium peroxometaborate*	7632-04-4	231-556-4

12. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2014 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
156	Cadmium fluoride*	7790-79-6	232-222-0
157	Cadmium sulphate*	10124-36-4; 31119-53-6	233-331-6
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	223-346-6
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	239-622-4
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)	--	--

13. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2015 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
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
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	--	--

14. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2015 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
164	1,3-propanesultone	1120-71-4	214-317-9
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1
167	Nitrobenzene	98-95-3	202-716-0
168	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-heptadecafluorononanoic acid and its sodium and ammonium salts	375-95-1; 21049-39-8; 4149-60-4	206-801-3

15. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2016 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5

16. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2017 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
170	4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	201-245-8
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2, 3830-45-3, 3108-42-7	206-400-3, 221-470-5
172	p-(1,1-dimethylpropyl)phenol	80-46-6	201-280-9
173	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	-

17. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JULY 2017 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
174	Perfluorohexane-1-sulfonic acid and its salts (PFHxS)	-	-

18. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2018 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
175	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.0 2,13.05 ,10]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	-
176	Benz[a]anthracene	200-280-6	56-55-3
177	Cadmium nitrate	233-710-6	10325-94-7
178	Cadmium carbonate	208-168-9	513-78-0
179	Cadmium hydroxide	244-168-5	21041-95-2
180	Chrysene	205-923-4	218-01-9
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	-	-

19. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2018 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
182	Octamethylcyclotetrasiloxane (D4)	556-67-2	209-136-7
183	Decamethylcyclopentasiloxane (D5)	541-02-6	208-764-9
184	Dodecamethylcyclohexasiloxane (D6)	540-97-6	208-762-8
185	Lead	7439-92-1	231-100-4
186	Disodium octaborate	12008-41-2	234-541-0
187	Benzo[ghi]perylene	191-24-2	205-883-8
188	Terphenyl hydrogenated	61788-32-7	262-967-7
189	Ethylenediamine	107-15-3	203-468-6
190	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride (trimellitic anhydride) (TMA)	552-30-7	209-008-0
191	Dicyclohexyl phthalate (DCHP)	84-61-7	201-545-9

20. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2019 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	401-720-1
193	Benzo[k]fluoranthene	207-08-9	205-916-6
194	Fluoranthene	206-44-0	205-912-4
195	Phenanthrene	85-01-8	201-581-5
196	Pyrene	129-00-0	204-927-3
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2,2,1]heptan-2-one	15087-24-8	239-139-9

21. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JULY 2019 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
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)	-	-
199	2-methoxyethyl acetate	110-49-6	203-772-9
200	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	-	-
201	4-tert-butylphenol (PTBP)	98-54-4	202-679-0

22. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2020 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	404-360-3
203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	400-600-6
204	Diisohexyl phthalate	71850-09-4	276-090-2
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	-

23. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2020 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
206	1-vinylimidazole	1072-63-5	214-012-0
207	2-methylimidazole	693-98-1	211-765-7
208	Butyl 4-hydroxybenzoate (Butylparaben)	94-26-8	202-318-7
209	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	245-152-0

24. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2021 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
210	Bis(2-(2-methoxyethoxy)ethyl) ether	143-24-8	205-594-7
211	Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	-	-

25. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JULY 2021 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
212	1,4-dioxane	123-91-1	204-661-8
213	2,2-bis(bromomethyl)propane 1,3-diol (BMP), 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA), 2,3-dibromo-1-propanol (2,3-DBPA)	3296-90-0, 36483-57-5/1522-92-5, 96-13-9	221-967-7, 253-057-0, 202-480-9
214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	-	-
215	4,4'-(1-methylpropylidene)bisphenol; (bisphenol B)	77-40-7	201-025-1
216	Glutaral	111-30-8	203-856-5
217	Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17]	-	-
218	Orthoboric acid, sodium salt	13840-56-7	237-560-2
219	Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	-	-

26. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2022 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
220	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	-	-
221	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC)	119-47-1	204-327-1
222	S-(tricyclo[5.2.1.0 ^{2,6}]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8	401-850-9
223	Tris(2-methoxyethoxy) vinylsilane	1067-53-4	213-934-0

27. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2022 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
224	N-(hydroxymethyl)acrylamide	924-42-5	213-103-2

28. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2023 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
225	1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene] (BTBPE)	37853-59-1	253-692-3
226	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol (TBBPA)	79-94-7	201-236-9
227	4,4'-sulphonyldiphenol (BPS)	80-09-1	201-250-5
228	Barium diboron tetraoxide	13701-59-2	237-222-4
229	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof (TBPH)	-	-
230	Isobutyl 4-hydroxybenzoate	4247-02-3	224-208-8
231	Melamine	108-78-1	203-615-4
232	Perfluoroheptanoic acid (PFHpA) and its salts	-	-
233	Reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	-	473-390-7

29. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2023 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
234	Bis(4-chlorophenyl) sulphone (BCPS)	80-07-9	201-247-9
235	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8

30. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2024 BY ECHA

No.	Substance Name	CAS NO.	EC NO.
236	2,4,6-tri-tertbutylphenol	732-26-3	211-989-5
237	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol	3147-75-9	221-573-5
238	2-(Dimethylamino)-2-(4-methylbenzyl)-1-(4-morpholinophenyl)butan-1-one	119344-86-4	438-340-0
239	Bumetrizole	3896-11-5	223-445-4
240	Oligomerisation and alkylation reaction products of 2-phenylpropene and pheno	-	700-960-7

Note:

- “*” denotes the concentration of substance cannot be determined directly but be converted from the concentration of specific heavy metal(s).
- “#” denotes the substances are UVCB (substance of unknown or variable composition, complex reaction products or biological material), the test results are calculated based on the main constituents.
- As per article 33 of the REACH regulation (EC No. 1907/2006), recipients of product must be provided with information of safe use if any of the tested substances exceeded 0.1% (w/w).



APPENDIX II

1. According to the Article 33 of the Regulation (EC) No. 1907/2006(REACH)-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 a Result 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 any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a Result above 0.1% weight by weight(w/w) shall provide the consumer with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance. The relevant information shall be provided, free of charge, within 45 days of receipt of the request.

2. According to the Article 33 of the Regulation (EC) No. 1907/2006(REACH)-Notification of the Substance in Article.

—If a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1), EU and EEA producers or importers of articles have to notify ECHA when their article contains a substance on the Candidate List. This obligation applies if the substance is present above 0.1%(w/w) and its quantities in the produced/imported articles are above 1 tonne in total per year.

3. According to the other articles of the Regulation(EC) No. 1907/2006(REACH), The relevant obligation for the substance on its own or in preparation.

—OBLIGATIONS: SUBSTANCES

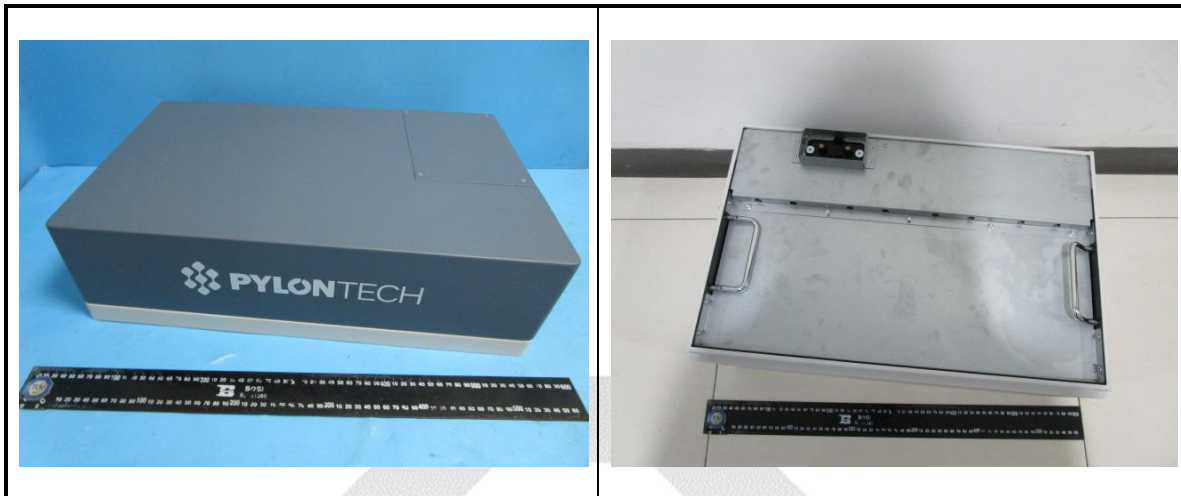
From 28 October 2008, EU&EEA suppliers of a substance have to provide a safety data sheet to their customers when the substance is on the Candidate List.

—OBLIGATIONS: PREPARATIONS

From 28 October 2008, EU&EEA suppliers of a preparation not classified as dangerous according to Directive 1999/45/EC have to provide the recipients, at their request, with a safety data sheet if the preparation contains at least one substance on the Candidate List and its individual Result is at least 0.1%(w/w) for non gaseous preparations and at least 0.2% by volume for gaseous preparations.

APPENDIX III

Photos of submitted products



-----End of Report-----

