



怡利電子集團 E-LEAD ELECTRONIC GROUP :

☐台灣 Taiwan ☒江蘇 JIANGSU ☐泰國 THAILAND

☐客戶 Customer ☒供應商 Supplier ☐重要零件 Key part

☐一般零件 Common Part

承 認 書 Letter of Approval

☐Non-G.P. ☐G.P.

怡利料號 (E-LEAD P/N) : 3DD4W000036-00

單件重量(weight)(g) : 0.020551g 單件可回收率(recycle rate)(%) : 0%

品 名 (Product Description) : SMD HIGH POWER LED

供應商/客戶名稱(Supplier/Customer Title) : 健略股份有限公司

供應商/客戶料號(Supplier/Customer P/N) : XI3030P/KK3C-W8010S3S828362Z35/2N

地 址 (Address) : 新北市新店區中正路四維巷1弄2號2樓

電 話 (Telephone) : 04-24725508(台中 OFFICE)

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日 期 (Dated) : 2020 年 07 月 17 日(西元 YYYY/MM/DD)

供應商/客戶確認(Supplier/Customer Confirmation List) :

確認 (Confirmed by)	陳正達
核准 (Approved by)	賴寶成



怡利承認(Approved by E-LEAD) :

採購擔當確認 (Confirmed by buyer)	
設計擔當審核 (Reviewed by Designer)	
零工擔當審核 (Reviewed by PAE)	
工程主管核准 (Approved by Engineering Manager)	

EMC ■ HIGH POWER LED XI3030P/KK3C-W8010S3S828362Z35/2N



Features

- Top view white LED
- High luminous intensity output
- Typical Viewing Angle:120°
- Pb-free
- Pb-free
- ANSI Binning
- The product itself will remain within RoHS compliant version.
- Compliance with EU REACH.
- Compliance Halogen Free .(Br<900ppm,Cl<900ppm,Br+Cl<1500ppm)

Description

The Everlight XI3030P package has high efficacy, high CRI, mid power consumption, wide viewing angle and a compact form factor. These features make this package an ideal LED for all lighting applications.

Applications

- General lighting
- Decorative and Entertainment Lighting
- Indicators
- Illumination
- Agriculture lights

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Product Nomenclature

The product name is designated as below:

XI3030P/ XK 3 C - X XX XX XX XX XXXX X Z35/ 2N

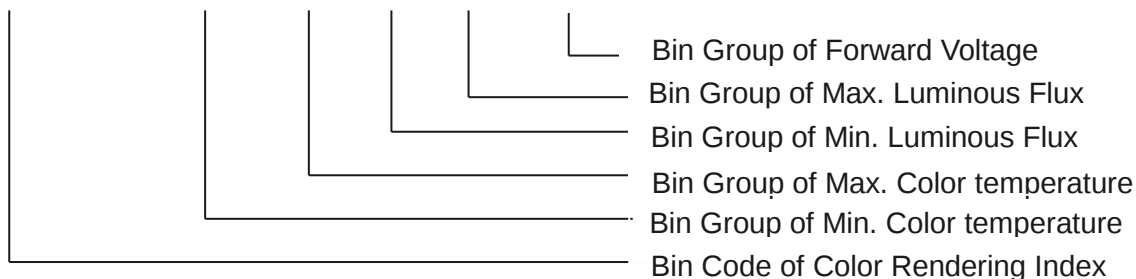


Table of Color Rendering Index

Symbol	Description
M	CRI(Min.) : 60
N	CRI(Min.) : 65
L	CRI(Min.) : 70
Q	CRI(Min.) : 75
K	CRI(Min.) : 80
P	CRI(Min.) : 85
H	CRI(Min.) : 90

Note:
Tolerance of Color Rendering Index: ± 2

Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit
Max. DC Forward Current (mA)	I_F	400	mA
Max. Peak Pulse Current (mA)	I_{Pulse}	480	mA
Thermal Resistance	R_{th}	15	°C/W
Max. Junction Temperature	T_J	115	°C
Operating Temperature	T_{Opr}	-40 ~ +85	°C
Storage Temperature	T_{Stg}	-40 ~ +100	°C
Max. Soldering Temperature	T_{Sol}	260	°C
Max. Allowable Reflow Cycles	n/a	2	cycles

Note:

Duty cycle = 1/10@1KHZ

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PN of the XI3030 series: LEDs



Order Code of XI3030	Minimum Luminous Flux (lm)	Typical Luminous Flux (lm)	CCT (K) Wavelength (nm)	Forward Voltage (V)	Current (mA)
XI3030P/KK3C-W8010S3S828362Z35/2N	120	180	8000-10000	2.8-3.6	350

Notes:

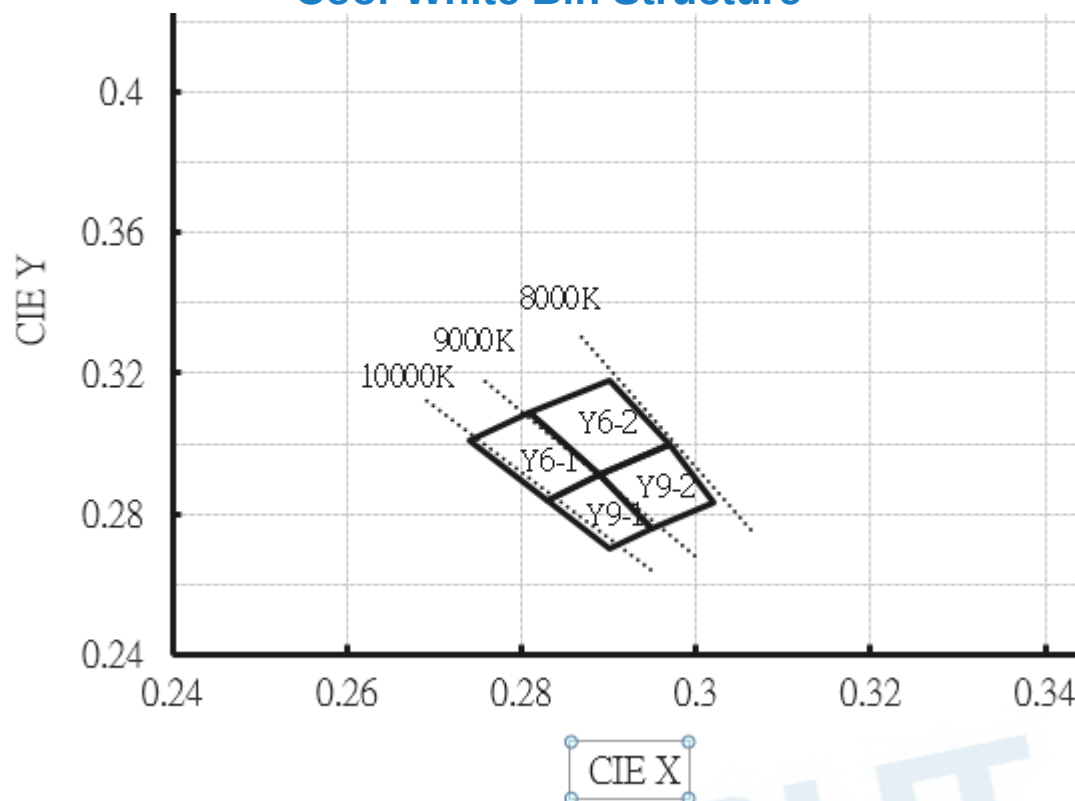
1. Luminous flux measurement tolerance: $\pm 10\%$.
2. The data of luminous flux measured at thermal pad=25°C
3. Typical luminous flux or light output performance is operated within the condition guided by this datasheet.
4. The CRI value is based on the Everlight testing instrument.
5. CRI measurement tolerance: ± 2 .

Product Binning
Luminous Flux Bins

Group	Bin	Minimum Photometric Flux (lm)	Maximum Photometric Flux (lm)
S	3	120.0	130.0
	4	130.0	140.0
	5	140.0	150.0
	6	150.0	160.0
	7	160.0	170.0
	8	170.0	180.0

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Cool-White Bin Structure



Bin	CIE X	CIE Y
Y6-2	0.289	0.291
	0.281	0.309
	0.29	0.318
	0.297	0.3
	0.289	0.291

Bin	CIE X	CIE Y
Y9-2	0.295	0.276
	0.289	0.291
	0.297	0.3
	0.302	0.283
	0.295	0.276

Bin	CIE X	CIE Y
Y6-1	0.283	0.284
	0.274	0.301
	0.281	0.309
	0.289	0.291
	0.283	0.284

Bin	CIE X	CIE Y
Y9-1	0.29	0.27
	0.283	0.284
	0.289	0.291
	0.295	0.276
	0.29	0.27

Note:

Color coordinates measurement allowance: ± 0.01 .

Forward Voltage Bins

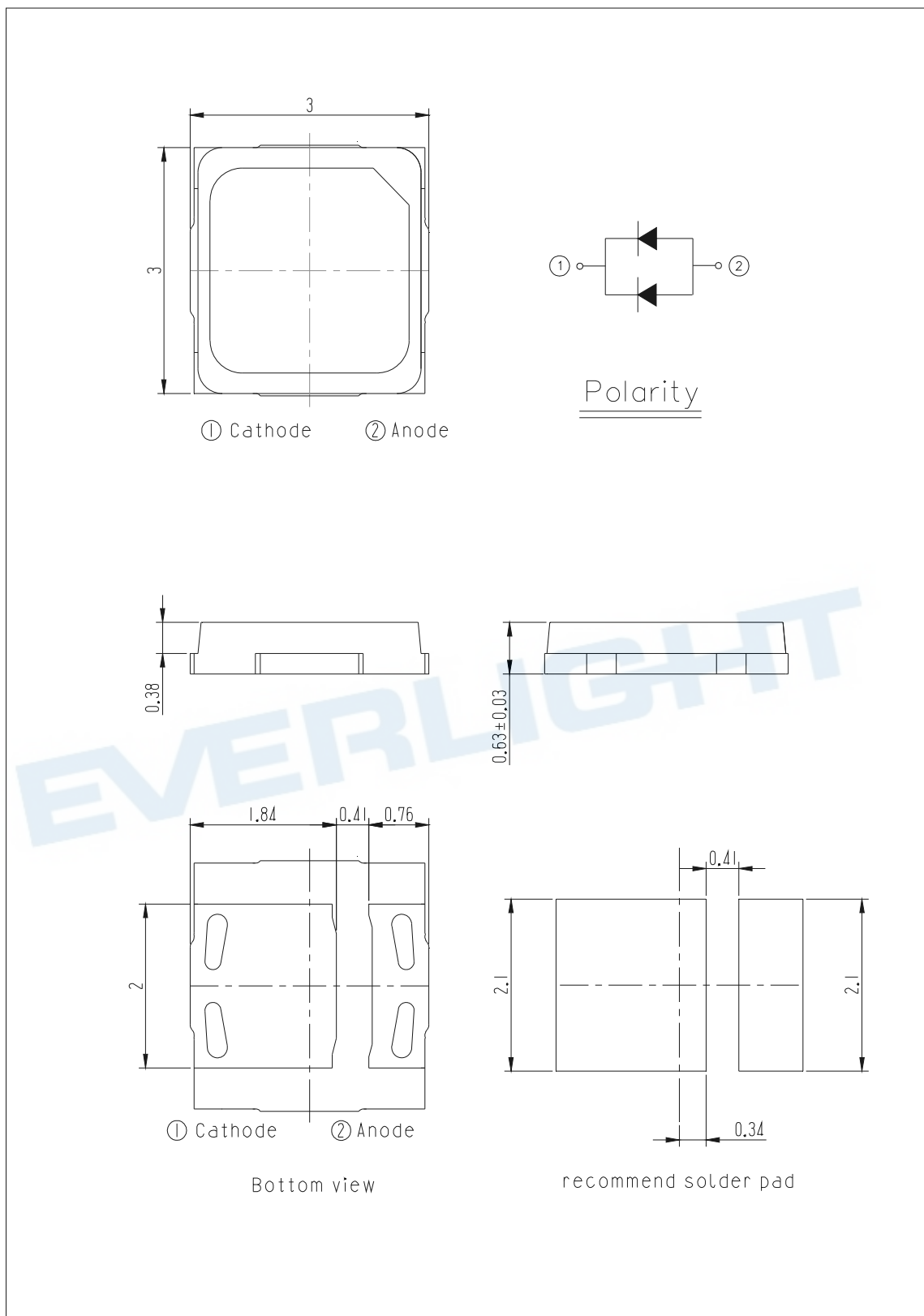
Bin	Minimum Forward Voltage (V)	Maximum Forward Voltage (V)
2829	2.8	2.9
2930	2.9	3.0
3031	3.0	3.1
3132	3.1	3.2
3233	3.2	3.3
3334	3.3	3.4
3435	3.4	3.5
3536	3.5	3.6

Notes:

1. Forward voltage measurement tolerance: $\pm 2\%$.
2. Forward voltage bins are defined at $I_F=350\text{mA}$ operation.

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Mechanical Dimension

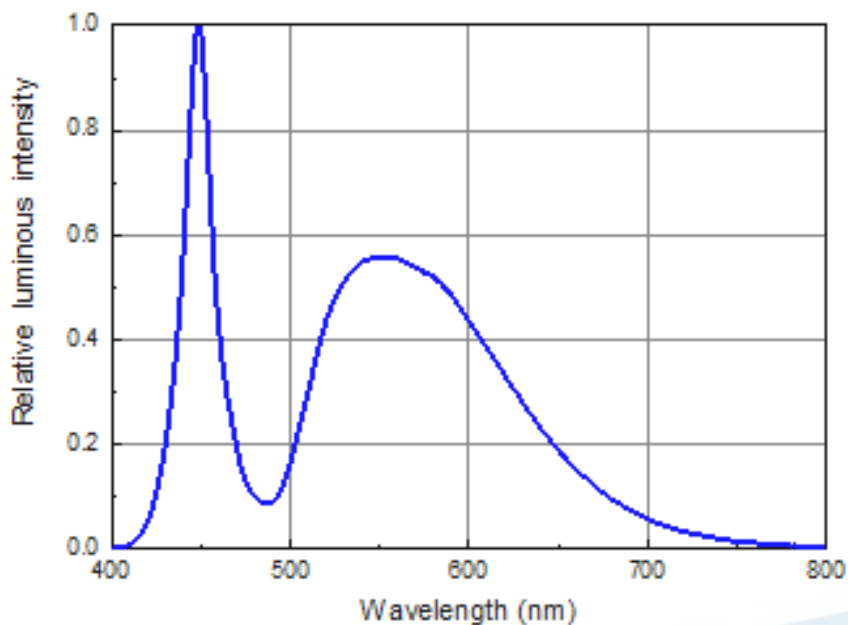


Notes:

1. Dimensions are in millimeters.
2. Tolerances unless mentioned are $\pm 0.2\text{mm}$.
3. The thermal pad is electrically unity from the Anode and contact pads.
4. Do not handle the device by the lens. Incorrect force applied to the lens may lead to the failure of devices.

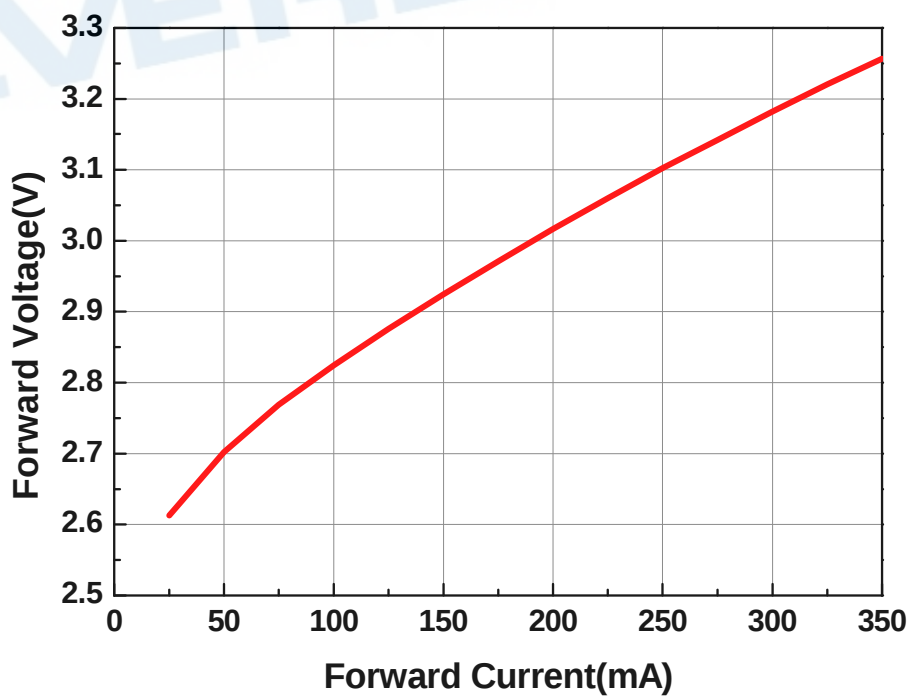
Wavelength Characteristics

Relative Spectral Distribution
@ Solder Pad Temperature = 25°C



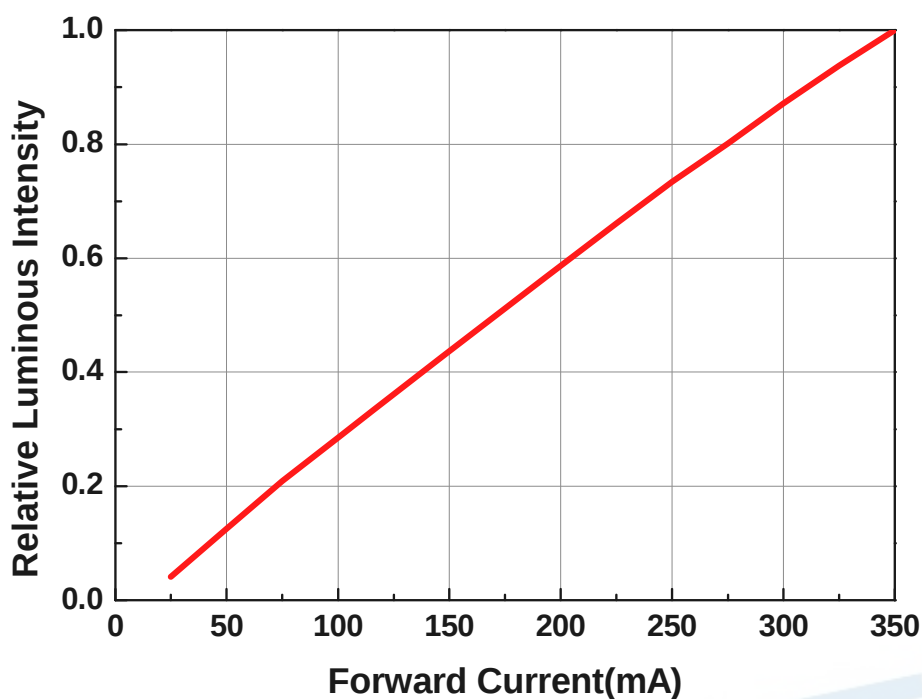
Typical Electro -Optical Characteristics Curve

@ Solder Pad Temperature = 25°C



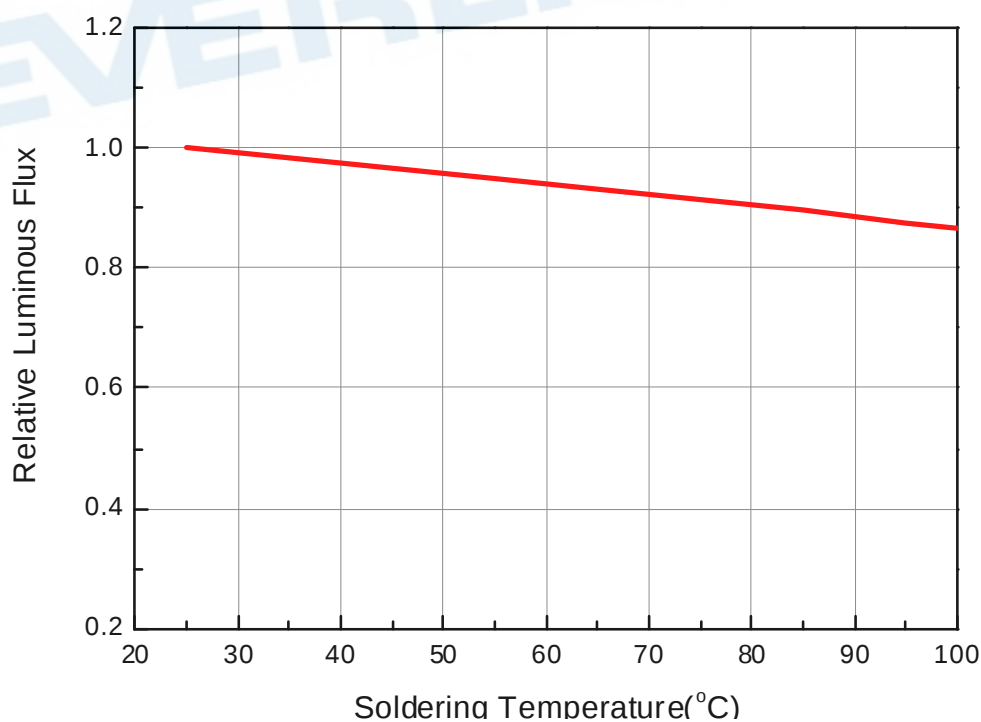
Typical Relative Luminous Flux vs. Forward Current

@ Solder Pad Temperature = 25°C



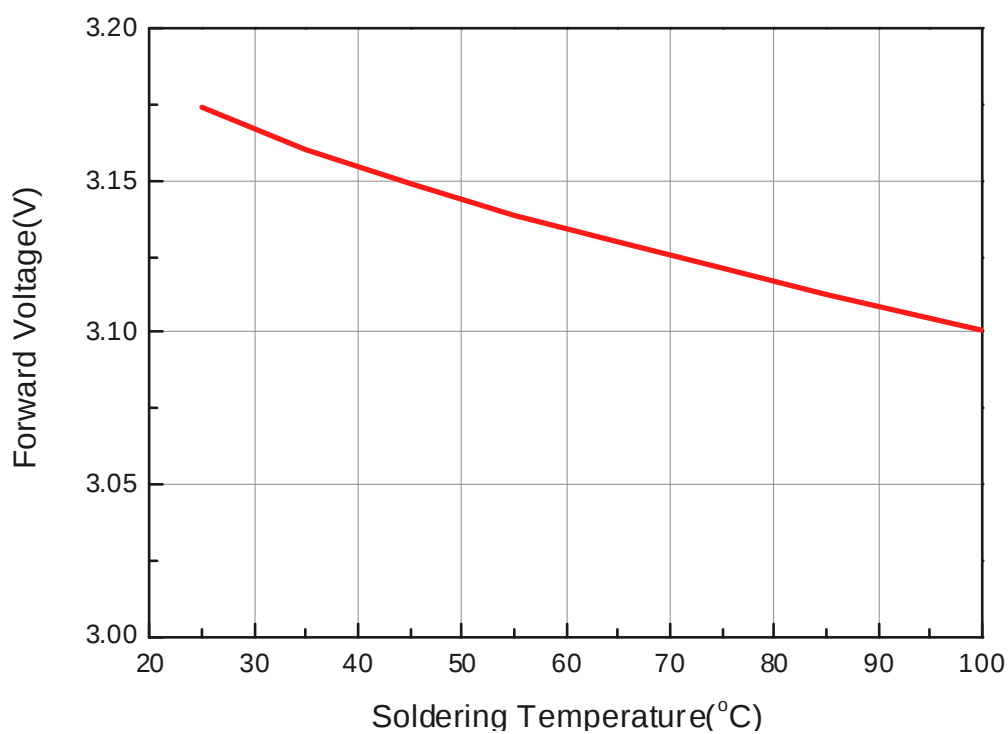
Relative Luminous Flux vs. Soldering Temperature

@ Forward Current = 350mA

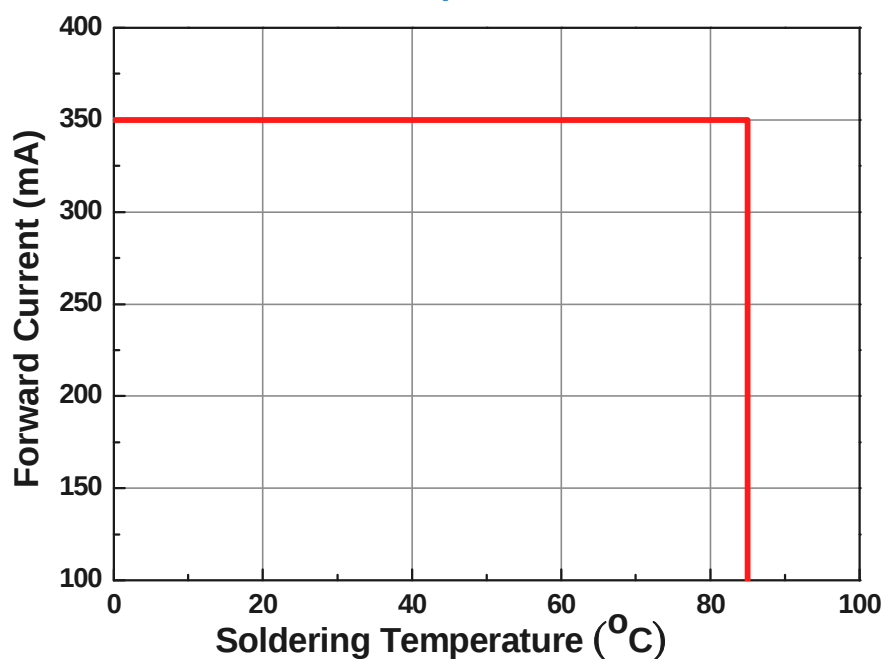


Forward Voltage vs. Soldering Temperature

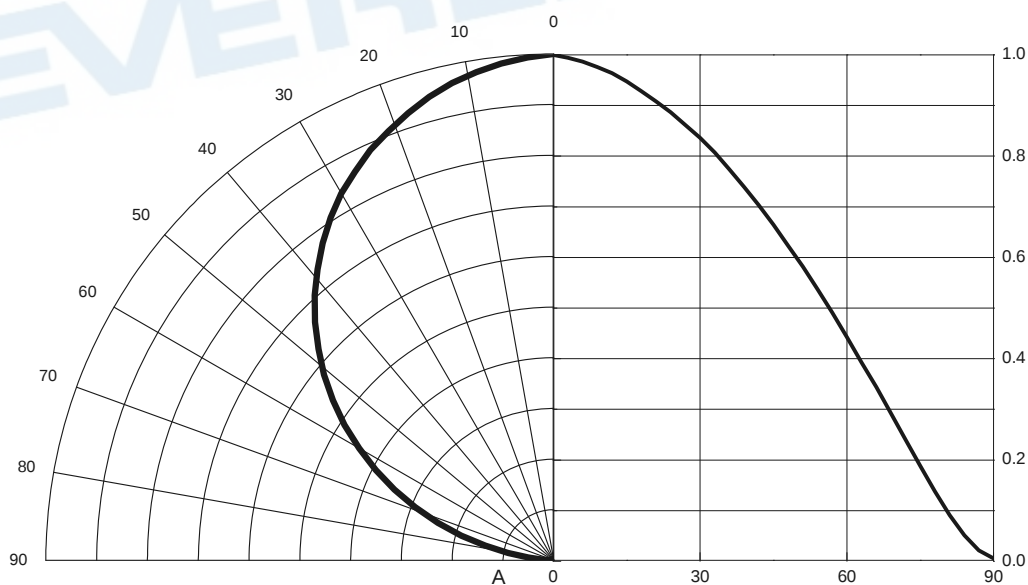
@ Forward Current = 350mA



Forward Current Derating Curve
@ Junction Temperature $<115^{\circ}\text{C}$



Typical Radiation Patterns
XI3030 series: Typical Diagram Characteristics of Radiation

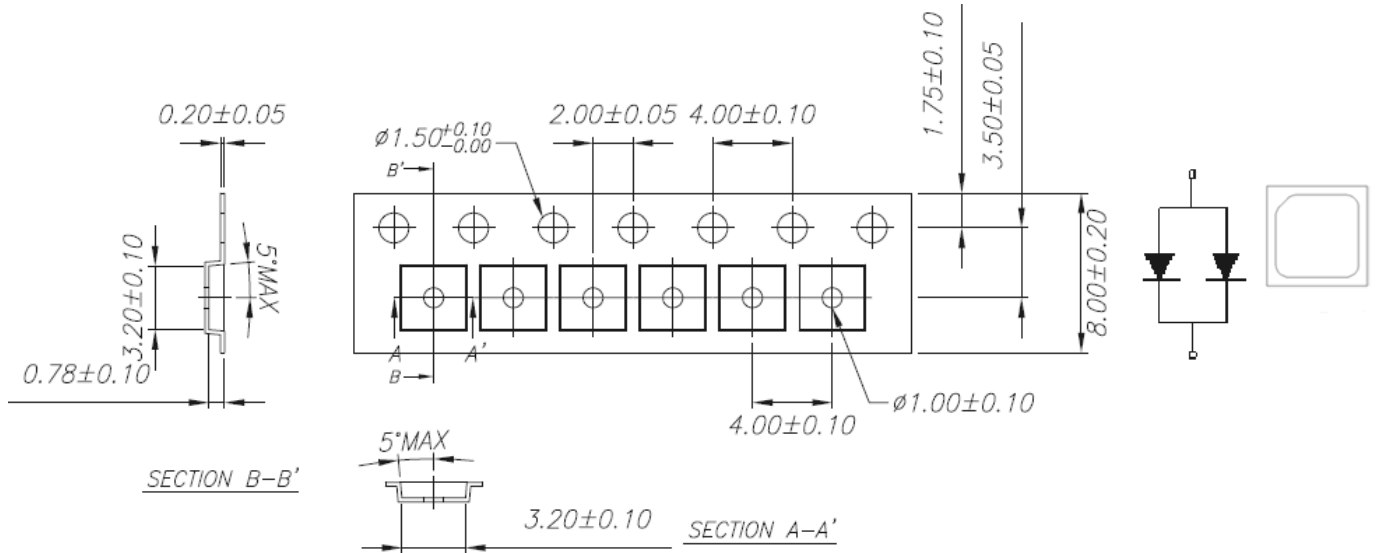


Notes:

1. $2\theta_{1/2}$ is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. View angle tolerance is $\pm 5^{\circ}$.

Emitter Tape Packaging

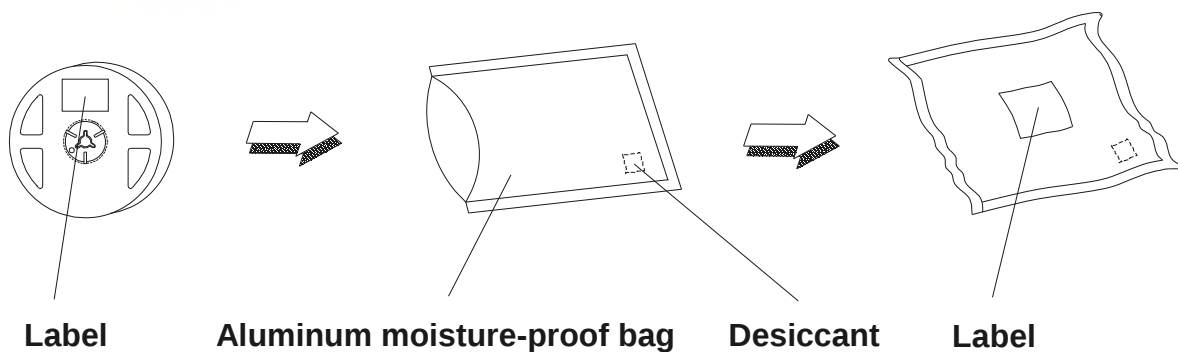
Carrier Tape Dimensions as the following:



Notes:

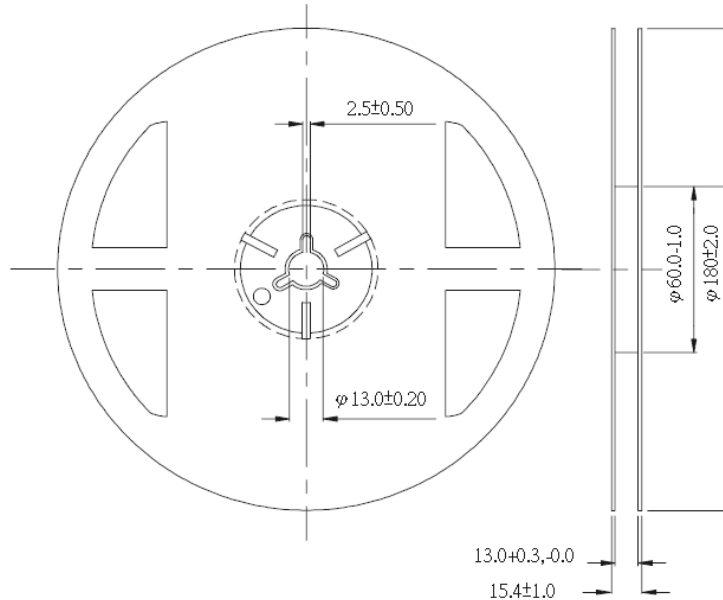
1. Tolerance unless mentioned is ± 0.1 mm; Unit = mm
2. Minimum packing amount is 250/500/1000/2000 pcs per reel

Moisture Resistant Packaging



Emitter Reel Packaging

Reel Dimensions



Notes:

1. Dimensions are in millimeters.
2. Tolerances unless mentioned are $\pm 0.1\text{mm}$.

Product Labeling

1. CPN: Customer Specification (when required)
2. P/N : Everlight Production Number
3. QTY: Packing Quantity
4. CAT: Luminous Flux (Brightness) Bin
5. HUE: Dom. Wavelength Rank
6. REF: Forward Voltage Bin
7. LOT No: Lot Number
8. MADE IN TAIWAN: Production Place

RoHS	EVERLIGHT	5
CPN: XXXXXXXXXXXXXXXXXXXX		
XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXX		
P/N: XXXXXXXXXXXX		
XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXX		
LOT NO: Y150716XXX-XXXXXXXXXX-XXXXXXXXXX		
QTY: 0123456789 HUE: XXXXXXXXXXXX		
CAT: XXXXXXXXXXXX REF: XXXXXXXXXXXX		
REFERENCE: BTPYMMDDXXXXX		
MSL-X MADE IN XXXXXX		

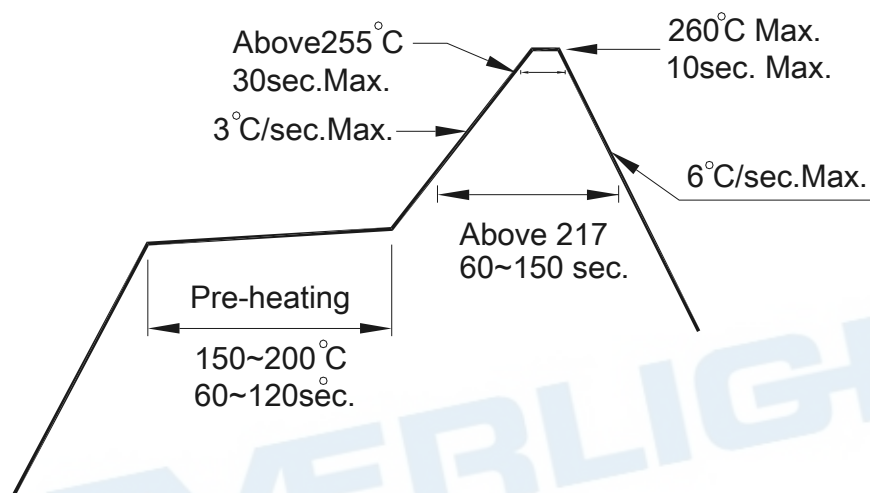


Precautions for Use

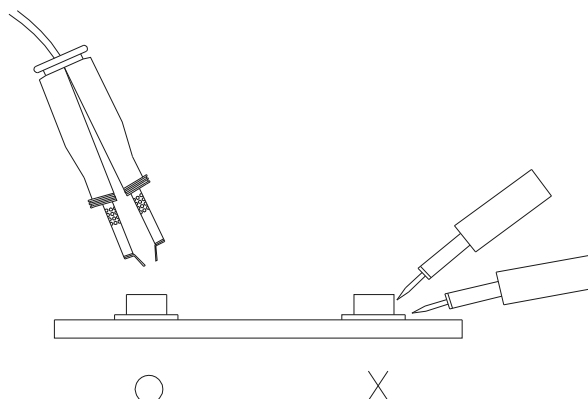
1. Over-current-proof
Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).
2. Storage
 - 2.1 Do not open moisture proof bag before the products are ready to use.
 - 2.2 Before opening the package: The LEDs should be kept at 30°C or less and 90%RH or less.
 - 2.3 After opening the package: The LED's floor life is 168 Hrs under 30°C or less and 60% RH or less. If unused LEDs remain, it should be stored in moisture proof packages.
 - 2.4 If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.
Baking treatment: 60±5°C for 24 hours.

3. Soldering Condition

3.1 Pb-free solder temperature profile



- 3.2 Reflow soldering should not be done more than two times.
- 3.3 When soldering, do not put stress on the LEDs during heating.
- 3.4 After soldering, do not warp the circuit board.
4. Soldering Iron
Each terminal is to go to the tip of soldering iron temperature less than 350°C for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.
5. Repairing
Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.



DISCLAIMER

1. EVERLIGHT reserves the right(s) on the adjustment of product material mix for the specification.
2. The product meets EVERLIGHT published specification for a period of twelve (12) months from date of shipment.
3. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
4. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from the use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
5. These specification sheets include materials protected under copyright of EVERLIGHT. Reproduction in any form is prohibited without obtaining EVERLIGHT's prior consent.
6. This product is not intended to be used for military, aircraft, automotive, medical, life sustaining or lifesaving applications or any other application which can result in human injury or death. Please contact authorized EVERLIGHT sales agent for special application request.

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聲明書

億光電子工業股份有限公司（以下簡稱本公司）對於歐盟 REACH 法規（EC No.1907/2006 Registration, Evaluation, Authorization and Restriction of Chemicals），對應情形說明如下：

1. 本公司之 LED 產品(詳見附表一，以下簡稱本產品)符合歐盟 REACH 法規第三條第三項之定義。就本公司對本產品之瞭解，本產品並無物質符合歐盟 REACH 法規第七條之登記要求。故本公司無需針對歐盟 REACH 法規第七條之要求向專責機關進行產品物質登記程序。
2. 本產品可符合歐盟 REACH 法規(REACH Regulation (EC) 1907/2006) 205 項高度關注物質規範要求(詳見附表二)。
3. 本公司將持續關注歐盟 REACH 法規之高度關注物質發展情形，並依據歐盟 REACH 法規所公佈之通報時程將本產品是否有使用高度關注物質之情形進行通報。

此致 怡利電子科技（江蘇）有限公司

億光電子工業股份有限公司

公司負責人：葉寅夫

日期：西元 2020 年 07 月 17 日

附表一 億光銷售產品品名

XI3030P/KK3C-W8010S3S828362Z35/2N		

附表二

第一批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
1	蒽 Anthracene	120-12-7	204-371-1
2	4,4'-二氨基二苯甲烷 4,4'- Diaminodiphenylmethane	101-77-9	202-974-4
3	鄰苯二甲酸二丁酯 Dibutyl phthalate	84-74-2	201-557-4
4	氯化鈷 Cobalt dichloride	7646-79-9	231-589-4
5	五氧化砷 Diarsenic pentaoxide	1303-28-2	215-116-9
6	三氧化二砷 Diarsenic trioxide	1327-53-3	215-481-4
7	重鉻酸鈉 Sodium dichromate	7789-12-0	-
8	二甲苯麝香 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4
9	鄰苯二甲酸二(2-乙基己)酯 Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-0
10	六溴環十二烷 Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α - HBCDD, β -HBCDD, γ -HBCDD)	25637-99-4 3194-55-6 (134237-50-6, 134237-51-7, 134237-52-8)	247-148-4 221-695-9
11	C10-13 氯代烴(短鏈氯化蠟) Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5
12	三丁基氧化錫	56-35-9	200-268-0

	Bis(tributyltin)oxide		
13	酸式砷酸鉛 Lead hydrogen arsenate	7784-40-9	232-064-2
14	鄰苯二甲酸丁苄酯 Benzyl butyl phthalate	85-68-7	201-622-7
15	三乙基砷酸酯 Triethyl arsenate	15606-95-8	427-700-2

第二批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
16	2,4-二硝基甲苯 2,4-Dinitrotoluene	121-14-2	204-450-0
17	蒽油 Anthracene oil	90640-80-5	292-602-7
18	蒽油,蒽糊,輕油 Anthracene oil, anthracene paste, distn. Lights	91995-17-4	295-278-5
19	蒽油,蒽糊,蒽餾分離液 Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9
20	蒽油,含蒽量少 Anthracene oil, anthracene-low	90640-82-7	292-604-8
21	蒽油,蒽糊 Anthracene oil, anthracene paste	90640-81-6	292-603-2
22	二異丁基鄰苯二甲酯 Diisobutyl phthalate	84-69-5	201-553-2
23	鉻酸鉛 Lead chromate	7758-97-6	231-846-0
24	紅色鉬鉻酸鉛硫酸鹽 (C.I.紅色 104) Lead chromate molybdate sulfate red (C.I. Pigment Red 104)	12656-85-8	235-759-9
25	黃色硫化鉻酸鉛 (C.I.黃色 34) Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	215-693-7
26	丙烯醯胺 Acrylamide	79-06-1	201-173-7
27	三 2-(氯乙基)磷酸酯 Tris(2-chloroethyl)phosphate	115-96-8	204-118-5
28	煤瀝青,高溫	65996-93-2	266-028-2

(Coal tar pitch, high temperature)

第三批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
29	三氯乙烯 Trichloroethylene	79-01-6	201-167-4
30	硼酸 Boric acid	10043-35-3 / 11113-50-1	233-139-2 / 234-343-4
31	無水四硼酸二鈉 Disodium tetraborate, anhydrous	1330-43-4 12179-04-3 1303-96-4	215-540-4
32	水合硼酸鈉 Tetraboron disodium heptaoxide, hydrate	12267-73-1	235-541-3
33	鉻酸鈉 Sodium chromate	7775-11-3	231-889-5
34	鉻酸鉀 Potassium chromate	7789-00-6	232-140-5
35	重鉻酸銨 Ammonium dichromate	7789-09-5	232-143-1
36	重鉻酸鉀 Potassium dichromate	7778-50-9	231-906-6

第四批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
37	硫酸鈷 Cobalt(II) sulphate	10124-43-3	233-334-2
38	硝酸鈷 Cobalt(II) dinitrate	10141-05-6	233-402-1
39	碳酸鈷 Cobalt(II) carbonate	513-79-1	208-169-4
40	醋酸鈷 Cobalt(II) diacetate	71-48-7	200-755-8
41	乙二醇單甲醚 2-Methoxyethanol	109-86-4	203-713-7
42	乙二醇單乙醚 2-Ethoxyethanol	110-80-5	203-804-1
43	三氧化鉻	1333-82-0	215-607-8

	Chromium trioxide		
44	鉻酸及其寡聚體產生的酸類： 鉻酸 Chromic acid 重鉻酸 Dichromic acid 鉻酸及重鉻酸的寡聚體 Oligomers of chromic acid and dichromic acid	7738-94-5 13530-68-2	231-801-5 236-881-5

第五批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
45	乙二醇乙醚乙酸酯 (2-ethoxyethyl acetate)	111-15-9	203-839-2
46	鉻酸鋇 (strontium chromate)	7789-06-2	232-142-6
47	鄰苯二甲酸二(C7-11 支鏈與直鏈)烷基酯 (1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters)	68515-42-4	271-084-6
48	聯氨 (Hydrazine)	7803-57-8 302-01-2	206-114-9
49	N-甲基吡咯烷酮 (1-methyl-2-pyrrolidone)	872-50-4	212-828-1
50	1,2,3-三氯丙烷 (1,2,3-trichloropropane)	96-18-4	202-486-1
51	鄰苯二甲酸二(C6-8 支鏈與直鏈)烷基酯 · 富 C7 (1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich)	71888-89-6	276-158-1

第六批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
52	對特辛基苯酚/ 辛基酚 4-tert-Octylphenol	140-66-9	205-426-2
53	鄰甲氧基苯胺 2-Methoxyaniline	90-04-0	201-963-1
54	砷酸 Arsenic acid	7778-39-4	231-901-9
55	砷酸鈣 Calcium arsenate	7778-44-1	231-904-5

56	砷酸鉛 Trilead diarsenate	3687-31-8	222-979-5
57	1,2-二氯乙烷 1,2-Dichloroethane	107-06-2	203-458-1
58	双(2-甲氧基乙基)醚 Bis(2-methoxyethyl) ether	111-96-6	203-924-4
59	鄰苯二甲酸雙(2-甲氧基乙基)酯 Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6
60	N,N-二甲基乙醯胺 N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4
61	甲醛與苯胺的寡聚反應物 Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	500-036-1
62	疊氮化鉛 Lead diazide, Lead azide	13424-46-9	236-542-1
63	中性斯蒂酚酸鉛 Lead styphnate	15245-44-0	239-290-0
64	2,2'-二氯-4,4'-二氨基二苯基甲烷 2,2' -dichloro-4,4' - methylenedianiline (MOCA)	101-14-4	202-918-9
65	鉻酸鉻 Dichromium tris(chromate)	24613-89-6	246-356-2
66	氫氧化鉻酸鋅鉀* Potassium hydroxyoctaoxodizin catedichromate	11103-86-9	234-329-8
67	八氫氧化五鉻酸鋅 Pentazinc chromate octahydroxide	49663-84-5	256-418-0
68	酚酞 Phenolphthalein	77-09-8	201-004-7
69	矽酸鋁・耐火陶瓷纖維(主要成分濃度於可變範圍內) Aluminosilicate Refractory Ceramic Fibres (RCF)	NA	NA
70	鋯矽酸鋁・耐火陶瓷纖維 (主要成分濃度於可變範圍內) Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)	NA	NA
71	苦味酸鉛 Lead dipicrate	6477-64-1	229-335-2

第七批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
72	三甘醇二甲醚 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	203-977-3
73	乙二醇二甲醚 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9
74	三氧化二硼 Diboron trioxide	1303-86-2	215-125-8
75	甲醯胺 Formamide	75-12-7	200-842-0
76	甲基磺酸鉛 Lead(II) bis(methanesulfonate)	17570-76-2	401-750-5
77	異氰尿酸三縮水甘油酯 TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine- 2,4,6(1H,3H,5H)-trione)	2451-62-9	219-514-3
78	異氰尿酸 β-三縮水甘油酯 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
79	4,4'-二(N,N-二甲氨基)二苯甲酮 (米氏酮) 4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	202-027-5
80	4,4'-(对二甲氨基)二苯基甲烷 (米氏鹼) N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2
81	鹼性紫 3 [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-	548-62-9	208-953-6

	ylidene]dimethylammonium chloride (C.I. Basic Violet 3)		
82	鹼性藍 26 [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	219-943-6
83	溶劑藍 4 α,α -Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	229-851-8
84	α,α -二[(二甲氨基)苯基]-4-甲氨基苯甲醇 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	209-218-2

第八批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
85	十溴聯苯醚 Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	214-604-9
86	全氟十三酸 Pentacosafuorotridecanoic acid	72629-94-8	276-745-2
87	全氟十二烷酸 Tricosafuorododecanoic acid	307-55-1	206-203-2
88	全氟十一烷酸 Henicosafuoroundecanoic acid	2058-94-8	218-165-4
89	全氟代十四酸 Heptacosafuorotetradecanoic acid	376-06-7	206-803-4
90	辛基酚聚醚-9，包括界定明確的物質以及 UVCB 物質、聚合物和同系物 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated -covering well-defined substances and UVCB substances, polymers and homologues	-	-
91	分支或線性的壬基酚，含有線性或分支、共價綁定苯酚的 9 個碳烷基鏈的物質，包括 UVCB 物質以及任何含有獨立或組合的界	-	-

	定明確的同分異構體的物質 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		
92	偶氮二甲醯胺 Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8
93	順環己烷-1,2-二羧酸酐 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
94	甲基六氫苯酐、4-甲基六氫苯酐、甲基六氫化鄰苯二甲酸酐、3-甲基六氫苯二甲酯酐 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	甲氧基乙酸 Methoxy acetic acid	625-45-6	210-894-6

96	1,2-苯二羧二戊酯 (支鏈和直鏈) 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2
97	鄰苯二甲酸二異戊酯 Diisopentylphthalate (DIPP)	605-50-5	210-088-4
98	鄰苯二甲酸正戊基異戊基酯 N-pentyl-isopentylphthalate	776297-69-9	-
99	乙二醇二乙醚 1,2-Diethoxyethane	629-14-1	211-076-1
100	N,N-二甲基甲醯胺 N,N-dimethylformamide; dimethyl formamide	68-12-2	200-679-5
101	二丁基錫 Dibutyltin dichloride (DBT)	683-18-1	211-670-0
102	城式乙酸鉛 Acetic acid, lead salt, basic	51404-69-4	257-175-3

103	碱式碳酸鉛 Trilead bis(carbonate)dihydroxide (basic lead carbonate)	1319-46-6	215-290-6
104	碱式硫酸鉛 Lead oxide sulfate (basic lead sulfate)	12036-76-9	234-853-7
105	二鹽基鄰苯二甲酸鉛 [Phthalato(2-)]dioxotrilead (dibasic lead phthalate)	69011-06-9	273-688-5
106	雙(十八酸基)二氧代三鉛 Dioxobis(stearato)trilead	12578-12-0	235-702-8
107	C16-18-脂肪酸鉛鹽 Fatty acids, C16-18, lead salts	91031-62-8	292-966-7
108	氟硼酸鉛 Lead bis(tetrafluoroborate)	13814-96-5	237-486-0
109	氨基氰鉛鹽 Lead cyanamidate	20837-86-9	244-073-9
110	硝酸鉛 Lead dinitrate	10099-74-8	233-245-9
111	氧化鉛 Lead oxide (lead monoxide)	1317-36-8	215-267-0
112	四氧化三鉛 Lead tetroxide (orange lead)	1314-41-6	215-235-6
113	鈦酸鉛 Lead titanium trioxide	12060-00-3	235-038-9
114	鈦酸鉛鋯 Lead Titanium Zirconium Oxide	12626-81-2	235-727-4

115	氧化鉛與硫酸鉛的複合物 Pentalead tetraoxide sulphate	12065-90-6	235-067-7
116	顏料黃 41 Pyrochlore, antimony lead yellow	8012-00-8	232-382-1
117	摻雜鉛的矽酸鋇 Silicic acid, barium salt, lead-doped	68784-75-8	272-271-5
118	矽酸鉛 Silicic acid, lead salt	11120-22-2	234-363-3
119	亞硫酸鉛 (II) Sulfurous acid, lead salt, dibasic	62229-08-7	263-467-1
120	四乙基鉛	78-00-2	201-075-4

	Tetraethyllead		
121	三域式硫酸鉛 Tetralead trioxide sulphate	12202-17-4	235-380-9
122	磷酸氧化鉛 Trilead dioxide phosphonate	12141-20-7	235-252-2
123	呋喃 Furan	110-00-9	203-727-3
124	環氧丙烷 Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	200-879-2
125	硫酸二乙酯 Diethyl sulphate	64-67-5	200-589-6
126	硫酸二甲酯 Dimethyl sulphate	77-78-1	201-058-1
127	3-乙基-2-甲基-2-(3-甲基丁基)噁唑烷 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7
128	地樂酚 Dinoseb	88-85-7	201-861-7
129	4,4'-二氨基-3,3'-二甲基二苯甲烷 4,4'-methylenedi-o-toluidine	838-88-0	212-658-8
130	4,4'-二氨基二苯醚 4,4'-oxydianiline and its salts	101-80-4	202-977-0
131	4-胺基偶氮苯 4-Aminoazobenzene; 4-Phenylazoaniline	60-09-03	200-453-6
132	2,4-二氨基甲苯 4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7	202-453-1
133	2-甲氧基-5-甲基苯胺 6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1
134	4-氨基聯苯 Biphenyl-4-ylamine	92-67-1	202-177-1
135	鄰氨基偶氮甲苯 o-aminoazotoluene	97-56-3	202-591-2
136	鄰甲基苯胺 o-Toluidine; 2-Aminotoluene	95-53-4	202-429-0
137	N-甲基乙酰胺 N-methylacetamide	79-16-3	201-182-6
138	溴代正丙烷	106-94-5	203-445-0

	1-bromopropane; n-propyl bromide		
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第九批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
139	鎘 Cadmium	7440-43-9	231-152-8
140	氧化鎘 Cadmium oxide	1306-19-0	215-146-2
141	十五代氟辛酸銨鹽 Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4
142	全氟辛酸 Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-397-9
143	鄰苯二甲酸二正戊酯 Dipentyl phthalate (DPP)	131-18-0	205-017-9
144	分支或線性的壬基酚，包括含有 9 個碳烷基鏈的所有獨立的同分異構體和所有含有線性或分支 9 個碳烷基鏈的 UVCB 物質 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.	-	-

第十批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
145	硫化鎘 Cadmium sulphide	1306-23-6	215-147-8
146	直接紅28 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	直接黑28 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	鄰苯二甲酸二己酯 Dihexyl phthalate	84-75-3	201-559-5
149	亞乙基硫脲 Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7	202-506-9
150	醋酸鉛 Lead di (acetate)	301-04-2	206-104-4
151	磷酸三(二甲苯)酯 Trixylyl phosphate	25155-23-1	246-677-8

第十一批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
152	氯化鎘 Cadmium chloride	10108-64-2	233-296-7
153	支鏈和直鏈的 1,2-苯二甲酸二己酯 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5
154	過硼酸鈉 Sodium peroxometaborate	7632-04-4	231-556-4
155	過硼酸鈉 Sodium perborate; perboric acid, sodium salt	-	239-172-9 234-390-0

第十二批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
156	氟化鎘 Cadmium fluoride	7790-79-6	232-222-0
157	硫酸鎘 Cadmium sulphate	10124-36-4, 31119-53-6	233-331-6
158	2-苯并三唑-2-基-4,6-二-三級-丁基苯酚 (UV-320) 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	223-346-6
159	2-(2H-苯并三唑-2-基)-4,6-二三級戊基苯酚 (UV-328) 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8
160	10-乙基-4,4-二辛基-7-側氧-8-氧代-3,5-二硫代-4-錫代十四酸 2-乙基己酯(DOTE) 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	239-622-4
161	10-乙基-4,4-二辛基-7-氧-8-氧代-3,5-二硫代-4-錫代十四	-	-

	酸 2-乙基己酯和 10-乙基-4-[[2-[(2-乙基己基)氧]-2-氧 乙基]硫代]-4-辛基-7-氧-8-氧代-3,5-二硫代-4-錫代十四酸 2-乙基己酯的反應產物(DOTE 和 MOTE 的反應產物) reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-di thia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxo ethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dith ia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)		
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第十三批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	
162	鄰苯二甲酸二(C6-C6)烷基酯：(癸基·己基·辛基)酯與 1,2-鄰苯二甲酸的複合物且鄰苯 二甲酸二己酯含≥0.3% 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	68515-51-5 68648-93-1	27 27
163	5-仲丁基-2-(2,4-二甲基環己-3-烯-1-基)-5-甲基-1,3-二惡烷[1]·5-仲丁基-2-(4,6-二 甲基環己-3-烯-1-基)-5-甲基-1,3-二惡烷[2] [覆蓋任何[1]和[2]或者其任意組合的單獨的 異構體 (卡拉花醛及其同分易構物) 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]	-	-

第十四批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
164	硝苯 Nitrobenzene	98-95-3	202-716-0
165	2,4-貳三級丁基-6-(5-氯苯三唑-2-基)苯酚 (UV-327) 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV- 327)	3864-99-1	223-383-8
166	2-(2H-苯并三唑-2-基)-4-三級丁基-6-二級丁基苯酚(UV-350) 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1
167	1,3-丙磺內酯 1,3-propanesultone	1120-71-4	214-317-9

168	全氟壬酸及其鈉與銨鹽 Perfluorononan-1-oic-acid and its sodium and ammonium salt	375-95-1	206-801-3
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第十五批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
169	苯并(a)芘 Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5

第十六批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
170	雙酚 A 4,4'-isopropylidenediphenol (bisphenol A; BPA))	80-05-7	201-245-8
171	4-庚基苯酚, 支鍊及直鍊 包括含有 7 個碳烷基鏈的所有獨立的同分異構體和所有含有線性或分支 7 個碳烷基鏈的 UVCB 物質 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]	-	-
172	十九氟癸酸及其鈉和銨鹽 Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3108-42-7 335-76-2 3830-45-3	- 206-400-3 221-470-5
173	對(1,1-二甲基丙基)苯酚 p-(1,1-dimethylpropyl)phenol 4-tert-pentylphenol (PTAP)	80-46-6	201-280-9

第十七批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
174	雙酚 A 4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	201-245-8
	全氟己基磺酸及其鹽類 Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	355-46-4	206-587-1

第十八批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
175	1,2-苯并菲; Chrysene	218-01-9	205-923-4
176	苯[a]蒽 Benz[a]anthracene	56-55-3	200-280-6
177	硝酸鎘 Cadmium nitrate	10325-94-7	233-710-6
178	氫氧化鎘 Cadmium hydroxide	21041-95-2	244-168-5
179	碳酸鎘 Cadmium carbonate	513-78-0	208-168-9
180	1,6,7,8,9,14,15,16,17,17,18,18-十二氯五環 [12.2.1.16,9.02,13.05,10]十八碳-7,15-二烯 (“Dechlorane Plus” TM)[含有其任何單獨的反式和順 式異構體或其任何組合] 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”TM) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	-
181	1,3,4-噻二唑-2,5-二硫醇與甲醛和支鏈和直鏈 4-庚基酚 的反應產物(RP-HP) [含有≥0.1%w/w 支鏈和直鏈的 4- 庚基酚] 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]	-	-

第十九批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
182	1,2,4-苯三甲酸酐 Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (Trimellitic Anhydride) (TMA)	552-30-7	209-008-0
183	苯并[g,h,i]芘 Benzo[ghi]perylene	191-24-2	205-883-8

184	十甲基環五矽氧烷 Decamethylcyclopentasiloxane (D5)	541-02-6	208-764-9
185	鄰苯二甲酸二環己酯 Dicyclohexyl phthalate (DCHP)	84-61-7	201-545-9
186	八硼酸二鈉 Disodium octaborate	12008-41-2	234-541-0
187	十二甲基環六矽氧烷 Dodecamethylcyclohexasiloxane (D6)	540-97-6	208-762-8
188	乙二胺 Ethylenediamine (EDA)	107-15-3	203-468-6
189	鉛 Lead	7439-92-1	231-100-4
190	八甲基環四矽氧烷 Octamethylcyclotetrasiloxane (D4)	556-67-2	209-136-7
191	氫化聯三苯 Terphenyl, hydrogenated	61788-32-7	262-967-7

第二十批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
192	2,2-雙(4-羥基苯基)-4-甲基戊烷 2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	401-720-1
193	苯并[k]芘 Benzo[k]fluoranthene	207-08-9	205-916-6
194	芘 Fluoranthene	206-44-0 93951-69-0	205-912-4
195	菲 Phenanthrene	85-01-8	201-581-5
196	芘 Pyrene	129-00-0 1718-52-1	204-927-3
197	1,7,7-三甲基-3-(苯亞甲基)雙環[2,2,1]庚烷-2-酮 (3-苯亞甲基樟腦) 1,7,7-trimethyl-3-(phenylmethylene) bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor)	15087-24-8	239-139-9

第二十一批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
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198	2,3,3,3-四氟-2-(七氟丙氧基)丙酸及其鹽和醯基鹵化物(包括任何含有獨立或組合的同分異構體物質) (HFPO-DA) 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	甲氧基乙酸乙酯 2-methoxyethyl acetate	110-49-6	203-772-9
200	4-叔丁基苯酚 4-tert-butylphenol(PTBP)	98-54-4	202-679-0
201	三(4-壬基苯基·支鏈和直鏈)亞磷酸酯含 0.1%W/W 的 4-壬基苯酚(支鏈和直鏈) TNPP Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	-	-

第二十二批 SVHC

No.	SUBSTANCE NAME	CAS NUMBER	EC NUMBER
202	2-苄基-2-二甲基氨基-1-(4-嗎啉苯基)丁酮 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	404-360-3
203	2-甲基-1-[4-(甲基硫代)苯基]-2-(4-嗎啉基)-1-丙酮 2-methyl-1-(4-methylthiophenyl)-2-morpholino propan-1-one	71868-10-5	400-600-6
204	二異己基鄰苯二甲酸酯 Diisohexyl phthalate	71850-09-4	276-090-2
205	全氟丁烷磺酸及其鹽類 Perfluorobutane sulfonic acid (PFBS) and its salts	-	-