



環境管理物質不使用承諾書

Certificate of the Non-Use Environmentally Hazardous Substance



致：華瑞功率電子股份有限公司之客戶

To: CET-MOS Customers

發文：華瑞功率電子股份有限公司 品保處

From: QRA Division in CET-MOS Corporation.

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QRA Director

說明：

Context:

華瑞功率電子股份有限公司保證自 2019 年 8 月起交貨之產品均符合：
CET-MOS Corporation guarantees that all products delivered since July
2018 are in compliance：

1. COMMISSION DELEGATED DIRECTIVE (EU) 2015/863 of 31 March 2015.
ANNEX II : Restricted substances referred to in Article 4(1) and maximum concentration values tolerated by weight in homogeneous materials. (Table1)
2. The International Electrochemical Commission's (IEC) Definition of Halogen-Free (IEC61249-2-21). (Table2)
3. Candidate List of substances of very high concern for Authorisation.(updated: 16/Jul/2019). (Table3)
(published in accordance with Article 59(10) of the REACH Regulation)



Table1 :

Restriction of Hazardous Substance		Maximum Concentration Values, MCVs)
Cd	Cadmium 鎘	0.01%(100ppm)
Pb	Lead 鉛	0.1%(1000ppm)
Hg	Mercury 汞	0.1%(1000ppm)
Cr6 ⁺	Hexavalent chromium 六價鉻	0.1%(1000ppm)
PBBs	Polybrominated biphenyls 多溴聯苯	0.1%(1000ppm)
PBDEs	Polybrominated diphenyl ethers 多溴聯苯醚	0.1%(1000ppm)
DEHP	Bis(2-ethylhexyl) phthalate 鄰苯二甲酸二(2-乙基己基)酯	0.1%(1000ppm)
BBP	Butyl benzyl phthalate 鄰苯二甲酸丁酯苯甲酯	0.1%(1000ppm)
DBP	Dibutyl phthalate 鄰苯二甲酸二丁酯	0.1%(1000ppm)
DIBP	Diisobutyl phthalate 鄰苯二甲酸二異丁酯	0.1%(1000ppm)

Table2 : IEC61249-2-21

900 ppm maximum chlorine
900 ppm maximum bromine
1500 ppm maximum total halogens

Table3

Candidate List

Note: Group entries are split in different rows.

<https://echa.europa.eu/candidate-list-table>

Substance name	Description	EC No.	CAS No.
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides	covering any of their individual isomers and combinations thereof	-	-
2-methoxyethyl acetate		203-772-9	110-49-6
4-tert-butylphenol		202-679-0	98-54-4
Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)		-	-
1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	3-benzylidene camphor; 3-BC	239-139-9	15087-24-8
2,2-bis(4'-hydroxyphenyl)-4-methylpentane		401-720-1	6807-17-6
Benzo[k]fluoranthene		205-916-6	207-08-9
Fluoranthene		205-912-4	206-44-0
Phenanthrene		201-581-5	85-01-8
Pyrene		204-927-3	129-00-0
Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	trimellitic anhydride; TMA	209-008-0	552-30-7
Benzo[ghi]perylene		205-883-8	191-24-2
Decamethylcyclopentasiloxane	D5	208-764-9	541-02-6
Dicyclohexyl phthalate	DCHP	201-545-9	84-61-7
Disodium octaborate		234-541-0	12008-41-2
Dodecamethylcyclohexasiloxane	D6	208-762-8	540-97-6
Ethylenediamine	EDA	203-468-6	107-15-3
Lead		231-100-4	7439-92-1
Octamethylcyclotetrasiloxane	D4	209-136-7	556-67-2
Terphenyl, hydrogenated		262-967-7	61788-32-7
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	-	-
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		236-948-9	13560-89-9
rel-(1R,4S,4aS,6aS,7S,10R,10aR,12aR)-1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4:7,10-dimethanodibenzo[a,e]cyclooctene		-	-
rel-(1R,4S,4aS,6aR,7R,10S,10aS,12aR)-1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4:7,10-dimethanodibenzo[a,e]cyclooctene		-	-
Benz[a]anthracene		200-280-6	56-55-3
Cadmium carbonate		208-168-9	513-78-0
Cadmium hydroxide		244-168-5	21041-95-2
Cadmium nitrate		233-710-6	10325-94-7
Chrysene		205-923-4	218-01-9
Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	with $\geq 0.1\%$ w/w 4-heptylphenol, branched and linear (4-HPbl)	-	-
Perfluorohexane-1-sulphonic acid and its salts	PFHxS	-	-
4,4'-isopropylidenediphenol	Bisphenol A; BPA	201-245-8	80-05-7

Substance name	Description	EC No.	CAS No.
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	-	-
Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts		-	-
Nonadecafluorodecanoic acid		206-400-3	335-76-2
Decanoic acid, nonadecafluoro-, sodium salt		-	3830-45-3
Ammonium nonadecafluorodecanoate		221-470-5	3108-42-7
p-(1,1-dimethylpropyl)phenol		201-280-9	80-46-6
Benzo[def]chrysene (Benzo[a]pyrene)		200-028-5	50-32-8
1,3-propanesultone		214-317-9	1120-71-4
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)		223-383-8	3864-99-1
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)		253-037-1	36437-37-3
Nitrobenzene		202-716-0	98-95-3
Perfluorononan-1-oic-acid and its sodium and ammonium salts		-	-
Perfluorononan-1-oic-acid		206-801-3	375-95-1
Sodium salts of perfluorononan-1-oic-acid		-	-, 21049-39-8
Ammonium salts of perfluorononan-1-oic-acid		-	-, 4149-60-4
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters	with $\geq 0.3\%$ of dihexyl phthalate (EC No. 201-559-5)	-	-
1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters		272-013-1	68648-93-1
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters		271-094-0	68515-51-5
5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2]	covering any of the individual stereoisomers of [1] and [2] or any combination thereof	-	-
5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane		-	-
5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane		-	-
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)		247-384-8	25973-55-1
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)		223-346-6	3846-71-7
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)		239-622-4	15571-58-1
Cadmium fluoride		232-222-0	7790-79-6
Cadmium sulphate		233-331-6	10124-36-4, 31119-53-6
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)		-	-
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear		271-093-5	68515-50-4
Cadmium chloride		233-296-7	10108-64-2
Sodium perborate, perboric acid, sodium salt		-	-

Substance name	Description	EC No.	CAS No.
Perboric acid, sodium salt		234-390-0	11138-47-9
Sodium perborate		239-172-9	15120-21-5
Sodium peroxometaborate		231-556-4	7632-04-4
Cadmium sulphide		215-147-8	1306-23-6
Dihexyl phthalate		201-559-5	84-75-3
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)		209-358-4	573-58-0
Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)		217-710-3	1937-37-7
Imidazolidine-2-thione (2-imidazoline-2-thiol)		202-506-9	96-45-7
Lead di(acetate)		206-104-4	301-04-2
Trixylyl phosphate		246-677-8	25155-23-1
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	-	-
26-(4-nonylphenoxy)-3,6,9,12,15,18,21,24-Octaoxahexacosan-1-ol		604-395-6	14409-72-4
2-[2-(4-nonylphenoxy)ethoxy]ethanol		243-816-4	20427-84-3
Nonylphenol, branched, ethoxylated	1 - 2.5 moles ethoxylated	500-209-1	68412-54-4
4-Nonylphenol, ethoxylated	1 - 2.5 moles ethoxylated	500-045-0	26027-38-3
Nonylphenol, ethoxylated		500-024-6	9016-45-9
Nonylphenol, ethoxylated (6,5-EO) (9016-45-9)		931-753-1	-
Nonylphenol, ethoxylated (15-EO) (9016-45-9)		931-756-8	-
Nonylphenol, ethoxylated (10-EO) (9016-45-9)		931-755-2	-
Nonylphenol, ethoxylated (8-EO) (9016-45-9)		931-754-7	-
2-[2-[2-[2-(4-nonylphenoxy)ethoxy]ethoxy]ethoxy]ethanol		230-770-5	7311-27-5
20-(4-nonylphenoxy)-3,6,9,12,15,18-hexaoxaicosan-1-ol		248-743-1	27942-27-4
Nonylphenol, branched, ethoxylated (CAS# 68412-54-4)		932-688-1	-
Nonylphenol, ethoxylated (EO = 4)		939-975-0	-
Nonylphenol, ethoxylated (polymer)		938-618-6	-
2-{2-[4-(3,6-dimethylheptan-3-yl)phenoxy]ethoxy}ethanol		687-833-9	1119449-38-5
2-[4-(3,6-dimethylheptan-3-yl)phenoxy]ethanol		687-832-3	1119449-37-4
Nonylphenolpolyglycoether		932-998-7	-
Nonylphenol, ethoxylated (EO = 10)		939-993-9	-
Isononylphenol, ethoxylated		609-346-2	37205-87-1
4-Nonylphenol, branched, ethoxylated	1 - 2.5 moles ethoxylated	500-315-8	127087-87-0
26-(nonylphenoxy)-3,6,9,12,15,18,21,24-octaoxahexacosan-1-ol		247-816-5	26571-11-9
Nonylphenolpolyglykoether		931-562-3	9016-45-9
Ammonium pentadecafluorooctanoate (APFO)		223-320-4	3825-26-1
Cadmium		231-152-8	7440-43-9
Cadmium oxide		215-146-2	1306-19-0
Dipentyl phthalate (DPP)		205-017-9	131-18-0
Pentadecafluorooctanoic acid (PFOA)		206-397-9	335-67-1

Substance name	Description	EC No.	CAS No.
1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear		284-032-2	84777-06-0
1,2-diethoxyethane		211-076-1	629-14-1
1-bromopropane (n-propyl bromide)		203-445-0	106-94-5
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine		421-150-7	143860-04-2
4,4'-methylenedi-o-toluidine		212-658-8	838-88-0
4,4'-oxydianiline and its salts		-	-
4,4'-oxydianiline		202-977-0	101-80-4
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	covering well-defined substances and UVCB substances, polymers and homologues	-	-
4-aminoazobenzene		200-453-6	60-09-3
4-methyl-m-phenylenediamine (toluene-2,4-diamine)		202-453-1	95-80-7
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	-	-
Phenol, 4-nonyl-, branched		284-325-5	84852-15-3
4-(3,6-dimethylheptan-3-yl)phenol		635-391-2	142731-63-3
4-(3,5-dimethylheptan-3-yl)phenol		635-389-1	186825-36-5
4-(1-ethyl-1-methylhexyl)phenol		257-907-1	52427-13-1
p-(1,1-dimethylheptyl)phenol		250-339-5	30784-30-6
p-nonylphenol		203-199-4	104-40-5
p-(1-methyloctyl)phenol		241-427-4	17404-66-9
p-isononylphenol		247-770-6	26543-97-5
Phenol, nonyl-, branched		291-844-0	90481-04-2
Nonylphenol		246-672-0	25154-52-3
4-(3-ethylheptan-2-yl)phenol		635-696-0	186825-39-8
4-(2,6-dimethylheptan-2-yl)phenol		635-388-6	521947-27-3
Isononylphenol		234-284-4	11066-49-2
6-methoxy-m-toluidine (p-cresidine)		204-419-1	120-71-8
[Phthalato(2-)]dioxotrilead		273-688-5	69011-06-9
Acetic acid, lead salt, basic		257-175-3	51404-69-4
Biphenyl-4-ylamine		202-177-1	92-67-1
Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)		214-604-9	1163-19-5
Cyclohexane-1,2-dicarboxylic anhydride	all possible combinations of the cis- and trans-isomers	-	-
cis-cyclohexane-1,2-dicarboxylic anhydride		236-086-3	13149-00-3
Cyclohexane-1,2-dicarboxylic anhydride		201-604-9	85-42-7
trans-cyclohexane-1,2-dicarboxylic anhydride		238-009-9	14166-21-3
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA)		204-650-8	123-77-3
Dibutyltin dichloride (DBTC)		211-670-0	683-18-1
Diethyl sulphate		200-589-6	64-67-5
Diisopentyl phthalate		210-088-4	605-50-5
Dimethyl sulphate		201-058-1	77-78-1
Dinoseb (6-sec-butyl-2,4-dinitrophenol)		201-861-7	88-85-7
Dioxobis(stearato)trilead		235-702-8	12578-12-0
Fatty acids, C16-18, lead salts		292-966-7	91031-62-8
Furan		203-727-3	110-00-9
Henicosaflluoroundecanoic acid		218-165-4	2058-94-8
Heptacosaflluorotetradecanoic acid		206-803-4	376-06-7

Substance name	Description	EC No.	CAS No.
Hexahydromethylphthalic anhydride	including cis- and trans- stereo isomeric forms and all possible combinations of the isomers	-	-
Hexahydromethylphthalic anhydride		247-094-1	25550-51-0
Hexahydro-4-methylphthalic anhydride		243-072-0	19438-60-9
Hexahydro-3-methylphthalic anhydride		260-566-1	57110-29-9
Hexahydro-1-methylphthalic anhydride		256-356-4	48122-14-1
Lead bis(tetrafluoroborate)		237-486-0	13814-96-5
Lead cyanamidate		244-073-9	20837-86-9
Lead dinitrate		233-245-9	10099-74-8
Lead monoxide (lead oxide)		215-267-0	1317-36-8
Lead oxide sulfate		234-853-7	12036-76-9
Lead titanium trioxide		235-038-9	12060-00-3
Lead titanium zirconium oxide		235-727-4	12626-81-2
Methoxyacetic acid		210-894-6	625-45-6
Methyloxirane (Propylene oxide)		200-879-2	75-56-9
N,N-dimethylformamide		200-679-5	68-12-2
N-methylacetamide		201-182-6	79-16-3
n-pentyl-isopentylphthalate		933-378-9	-
o-aminoazotoluene		202-591-2	97-56-3
o-toluidine		202-429-0	95-53-4
Orange lead (lead tetroxide)		215-235-6	1314-41-6
Pentacosafuorotridecanoic acid		276-745-2	72629-94-8
Pentalead tetraoxide sulphate		235-067-7	12065-90-6
Pyrochlore, antimony lead yellow		-	232-382-1
Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped	with lead (Pb) content above the applicable generic concentration limit for ' toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD),the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008	272-271-5	68784-75-8
Silicic acid, lead salt		234-363-3	11120-22-2
Sulfurous acid, lead salt, dibasic		263-467-1	62229-08-7
Tetraethyllead		201-075-4	78-00-2
Tetralead trioxide sulphate		235-380-9	12202-17-4
Tricosafuorododecanoic acid		206-203-2	307-55-1
Trilead bis(carbonate) dihydroxide		215-290-6	1319-46-6
Trilead dioxide phosphonate		235-252-2	12141-20-7
1, 2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)		203-794-9	110-71-4
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)		203-977-3	112-49-2
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)		219-514-3	2451-62-9
1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)		-	423-400-0
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)	209-218-2	561-41-1
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)		202-027-5	90-94-8
[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)	208-953-6	548-62-9

Substance name	Description	EC No.	CAS No.
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	219-943-6	2580-56-5
Diboron trioxide		215-125-8	1303-86-2
Formamide		200-842-0	75-12-7
Lead(II) bis(methanesulfonate)	-	401-750-5	17570-76-2
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)		202-959-2	101-61-1
α, α -Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	229-851-8	6786-83-0
1,2-dichloroethane		203-458-1	107-06-2
2,2'-dichloro-4,4'-methylenedianiline		202-918-9	101-14-4
2-Methoxyaniline, o-Anisidine		201-963-1	90-04-0
4-(1,1,3,3-tetramethylbutyl)phenol		205-426-2	140-66-9
Aluminosilicate Refractory Ceramic Fibres	are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and 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 (μm) 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	-	-
Arsenic acid		231-901-9	7778-39-4
Bis(2-methoxyethyl) ether		203-924-4	111-96-6
Bis(2-methoxyethyl) phthalate		204-212-6	117-82-8
Calcium arsenate		231-904-5	7778-44-1
Dichromium tris(chromate)		246-356-2	24613-89-6
Formaldehyde, oligomeric reaction products with aniline		500-036-1	25214-70-4
Lead diazide, Lead azide		236-542-1	13424-46-9
Lead dipicrate		229-335-2	6477-64-1
Lead styphnate		239-290-0	15245-44-0
N,N-dimethylacetamide		204-826-4	127-19-5
Pentazinc chromate octahydroxide		256-418-0	49663-84-5
Phenolphthalein		201-004-7	77-09-8
Potassium hydroxyoctaoxodizincatedichromate		234-329-8	11103-86-9
Trilead diarsenate		222-979-5	3687-31-8

Substance name	Description	EC No.	CAS No.
Zirconia Aluminosilicate Refractory Ceramic Fibres	are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and 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 (µm). c) alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight	-	-
1,2,3-trichloropropane		202-486-1	96-18-4
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich		276-158-1	71888-89-6
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters		271-084-6	68515-42-4
1-Methyl-2-pyrrolidone (NMP)		212-828-1	872-50-4
2-ethoxyethyl acetate		203-839-2	111-15-9
Hydrazine		206-114-9	302-01-2, 7803-57-8
Strontium chromate		232-142-6	7789-06-2
2-ethoxyethanol		203-804-1	110-80-5
2-methoxyethanol		203-713-7	109-86-4
Acids generated from chromium trioxide and their oligomers		-	-
Oligomers of chromic acid and dichromic acid		-	-
Chromic acid		231-801-5	13530-68-2
Dichromic acid		236-881-5	7738-94-5
Chromium trioxide		215-607-8	1333-82-0
Cobalt(II) carbonate		208-169-4	513-79-1
Cobalt(II) diacetate		200-755-8	71-48-7
Cobalt(II) dinitrate		233-402-1	10141-05-6
Cobalt(II) sulphate		233-334-2	10124-43-3
Ammonium dichromate		232-143-1	7789-09-5
Boric acid	EC No. 233-139-2 and EC No. 234-343-4	-	-
Boric acid, crude natural		234-343-4	11113-50-1
Boric acid		233-139-2	10043-35-3
Disodium tetraborate, anhydrous		215-540-4	12179-04-3, 1303-96-4, 1330-43-4
Potassium chromate		232-140-5	7789-00-6
Potassium dichromate		231-906-6	7778-50-9
Sodium chromate		231-889-5	7775-11-3
Tetraboron disodium heptaoxide, hydrate		235-541-3	12267-73-1
Trichloroethylene		201-167-4	79-01-6
Acrylamide		201-173-7	79-06-1
2,4-dinitrotoluene		204-450-0	121-14-2
Anthracene oil	-	292-602-7	90640-80-5
Anthracene oil, anthracene paste	-	292-603-2	90640-81-6
Anthracene oil, anthracene paste, anthracene fraction	-	295-275-9	91995-15-2

Substance name	Description	EC No.	CAS No.
Anthracene oil, anthracene paste, distn. lights	-	295-278-5	91995-17-4
Anthracene oil, anthracene-low	-	292-604-8	90640-82-7
Diisobutyl phthalate		201-553-2	84-69-5
Lead chromate		231-846-0	7758-97-6
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	-	235-759-9	12656-85-8
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	-	215-693-7	1344-37-2
Pitch, coal tar, high-temp.	-	266-028-2	65996-93-2
Tris(2-chloroethyl) phosphate		204-118-5	115-96-8
4,4'- Diaminodiphenylmethane (MDA)		202-974-4	101-77-9
5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)		201-329-4	81-15-2
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)		287-476-5	85535-84-8
Anthracene		204-371-1	120-12-7
Benzyl butyl phthalate (BBP)		201-622-7	85-68-7
Bis (2-ethylhexyl)phthalate (DEHP)		204-211-0	117-81-7
Bis(tributyltin) oxide (TBTO)		200-268-0	56-35-9
Cobalt dichloride		231-589-4	7646-79-9
Diarsenic pentaoxide		215-116-9	1303-28-2
Diarsenic trioxide		215-481-4	1327-53-3
Dibutyl phthalate (DBP)		201-557-4	84-74-2
Hexabromocyclododecane (HBCDD)	and all major diastereoisomers identified	-	-
1,2,5,6,9,10-hexabromocyclododecane		221-695-9	3194-55-6
Hexabromocyclododecane		247-148-4	25637-99-4
alpha-hexabromocyclododecane		-	134237-50-6
beta-hexabromocyclododecane		-	134237-51-7
gamma-hexabromocyclododecane		-	134237-52-8
Lead hydrogen arsenate		232-064-2	7784-40-9
Sodium dichromate		234-190-3	10588-01-9, 7789-12-0
Triethyl arsenate	-	427-700-2	15606-95-8



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致：華瑞功率電子股份有限公司之客戶

To: CET-MOS Customers

發文：華瑞功率電子股份有限公司 品保處

From: QRA Division in CET-MOS Corporation.

主旨：檢測報告鉛含量超標說明書

Subject: To declare Pb element out of testing report illustration.

發文日期：2018.7.1

Issued Date: 2018.7.1

說明：

Context:

1. 華瑞功率電子股份有限公司之TO&PPAK系列產品所提供之檢測報告裡，鉛含量超過1000ppm，其主要原因是生產的Die attach過程中，使用了高溫熔接的Soft Solder。

The testing report of TO&PPAK Series Product by CET-MOS offering, which its Pb element will be over 1000ppm. The mainly reason is to use high temperature soft solder fusion under die attach process.

2. Soft Solder是為RoHS排除管制，引用條文ANNEX III 7(a)所指之項目；請參閱DIRECTIVE 2011/65/EU。

The Soft Solder belongs to exemption item of RoHS as inside cite law of ANNEX III 7(a), please see exposition of DIRECTIVE 2011/65/EU.

3. 其他原物料則完全符合RoHS要求。

As to other raw materials all meet the RoHS requirements.

特此對華瑞功率電子股份有限公司之客戶說明與保證！

Hereby we declare that our interpretation and guarantee for CET-MOS customers.