Micro Commercial Components

Micro Commercial Components Corp.

130 W Cochran St, Unit B Simi Valley, CA 93065 Tel: 818- 701-4933 www.mccsemi.com

Certificate of RoHS Compliance

Micro Commercial Components Corp. (MCC) hereby certifies that all devices manufactured by MCC with "P" suffix in part numbering system (-BP/-AP/-TP) are in compliance with the Restriction of Hazardous Substances (RoHS) Directive 2002/95/EC(RoHS 1.0) & 2011/65/EU(RoHS 2.0) & 2015/863/EU(RoHS 3.0) and 'China RoHS'.

There are some packages contain Lead(Pb),which are also compliance with RoHS but apply exemption 7(a).The Lead exemption declaration and detail packages contains Lead please refer to page2 and page3.

The following table lists the restricted substances and their respective allowable maximum concentration values:

Restricted Substance	**Maximum Concentration Value**
Cadmium	≤ 100 ppm
Lead	≤ 1000 ppm
Hexavalent chromium	≤ 1000 ppm
Mercury	≤ 1000 ppm
Polybrominated biphenyl (PBB)	≤ 1000 ppm
Polybrominated diphenyl ether (PBDE)	≤ 1000 ppm
Bis(2-ethylhexyl) phthalate (DEHP)	≤ 1000 ppm
Butyl benzyl phthalate (BBP)	≤ 1000 ppm
Dibutyl phthalate (DBP)	≤ 1000 ppm
Diisobutyl phthalate (DIBP)	≤ 1000 ppm

Sincerely,

Micro Commercial Components

Mrs. Daisy Wang

Daisy Wang

QA Manager

Date: Jan.20,2024

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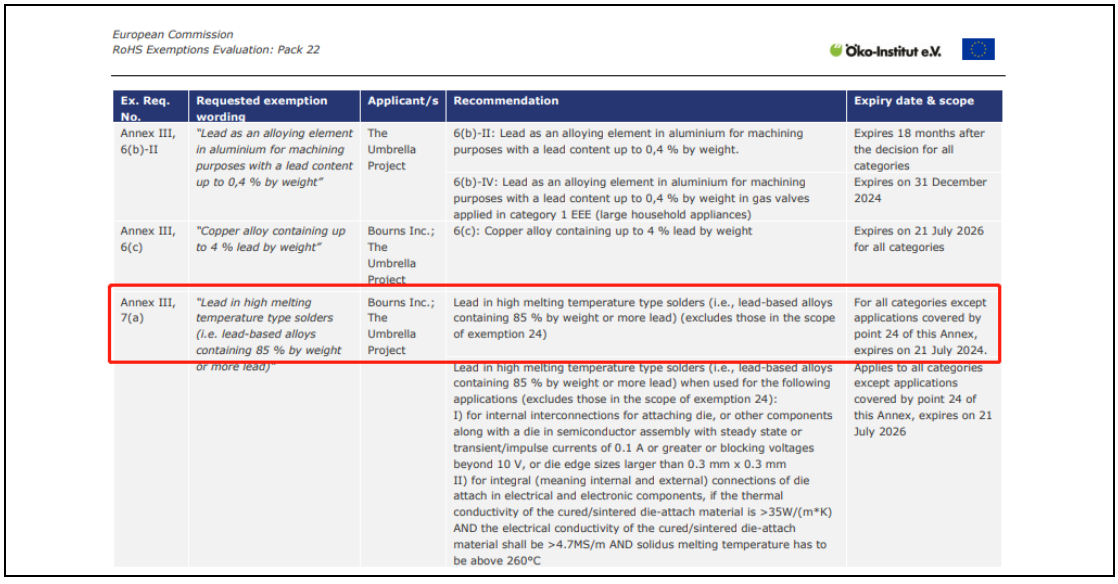
Declaration of Lead Exemption

Micro commercial components Corp.(MCC) hereby declared that lead is used in some solder type products (detail products see appendix 1), the lead is RoHS Exempted with 7a (lead in high melting temperature type die attach solders). The exempted item expired on July 21, 2021.

Solder suppliers are continuously finding the replaced material which not contain lead, still not find in the whole industry.Team appliled the exemption time extend to 2024, European Union agreed the application and pulished the detail information on their website.



European Commission
RoHS Exemptions Evaluation: Pack 22

Öko-Institut e.V.

Ex. Req. No.	Requested exemption wording	Applicant/s	Recommendation	Expiry date & scope
Annex III, 6(b)-II	*"Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight"*	The Umbrella Project	6(b)-II: Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight.	Expires 18 months after the decision for all categories
			6(b)-IV: Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight in gas valves applied in category 1 EEE (large household appliances)	Expires on 31 December 2024
Annex III, 6(c)	*"Copper alloy containing up to 4 % lead by weight"*	Bourns Inc.; The Umbrella Project	6(c): Copper alloy containing up to 4 % lead by weight	Expires on 21 July 2026 for all categories
Annex III, 7(a)	*"Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)"*	Bourns Inc.; The Umbrella Project	Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) (excludes those in the scope of exemption 24)	For all categories except applications covered by point 24 of this Annex, expires on 21 July 2024.
			Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) when used for the following applications (excludes those in the scope of exemption 24): I) for internal interconnections for attaching die, or other components along with a die in semiconductor assembly with steady state or transient/impulse currents of 0.1 A or greater or blocking voltages beyond 10 V, or die edge sizes larger than 0.3 mm x 0.3 mm II) for integral (meaning internal and external) connections of die attach in electrical and electronic components, if the thermal conductivity of the cured/sintered die-attach material is >35W/(m*K) AND the electrical conductivity of the cured/sintered die-attach material shall be >4.7MS/m AND solidus melting temperature has to be above 260°C	Applies to all categories except applications covered by point 24 of this Annex, expires on 21 July 2026

* EU RoHS website:https://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_Pack_22/RoHS_Pack-22_final_report_amended_February_2022.pdf

MCC R&D team also working on finding replacement, and now there is a sintered Ag process which will not applied 7a exemption, so far there is no suitable and cheap solution in the market. MCC will continue to look for suitable replacement plan.

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Appendix 1 List of packages containing Lead

Devices Type	Detail Packages list
Axial Plastic Devices	R-1,R-3,R-6,A-405,DO-41,DO-15,DO-201AD,DO-201AE, T-18,LEADED BUTTON,PRESSFIT
SMD Plastic Devices	DO-218AB,DPAK,D2-PAK,LMBS-1,MBS-1,MELF,HSMA,HSMB,HSMC,RA, SRA,SDB-1,SMAE,SMA,SMB,SMC,SOD-123FL,SOD-123HT, SMAL,SMBF,SMG,SMPA,TO-262,TO-262L,SMA-FL,SMAG,SMBG,SMCG, RA BUTTON,SRA BUTTON,TO-277A,TO-277B,SDBL-1,MBLS-1,DO-218AB, SOD-323F,SOD-123HE,SOD-123HE1,SOD-323HE, TBS, TBSL, TBL , TO-277, SOD-323FH,TOLL,DFN3333,DFN5060,SME,SMG
THRO-HOLE Plastic Devices	TO-126,TO-220AB,,TO-220AC,ITO-220AB,ITO-220AC,TO-220AB(H) , ITO-220,TO-220,TO-220F,TO-247,TO-247AB,TO-247AC, TO-247AD, TO-3P,TO-220,BUTTON,TO-18,TO-39,TO-3,TO-66,TO-262,TO-262L, RB-5,WOM,WOL,BR-6,BR-8D,KBP,KBPL,KBPC,KBPM,KBU,KBJ,KBJL, PB-3,PB-6,PB-10,GBU,GBJ,GBJL,GBL,GBP,GBPC,GBPC-W,GBPC-H,RS-1, RS-4L,RS-4M,RS-6,RS-6M,DBL-1,TO-251,TO-251S,D3K,RS-15M,RS-20M, RS-25M,MB-35(W),MP-50(W),MT, DB-1,MB-1,KBPR,AK, MT-35A, JB, JA, D3K,TSB-5,AK
MODULE	FJ,F1,F2,F3,F4,D1,D2,D3,D4,L1,L2,M1,M2,M3,M4,M5,T1,T2,D1N, C1,C2,E1,E2,E1A,E2A,W1,W2,W3,W4