

## 有害物质过程管理及物质限量要求函

## Hazardous Substances Process Management and Substance Restriction Requirement Letter

\_\_\_\_公司

我司(东莞美维电路有限公司, 以下简称为 DMC)已按照 QC080000 标准建立了有害物质过程管理体系(注: 此处及下文涉及的标准应以最新版本为准)。

Dongguan Meadville Circuits Limited(hereafter called DMC) has already implemented Hazardous Substances Process Management System according to QC080000 standard (Notes: Standard mentioned here and below shall be accorded with the latest version)

我司(DMC)有害物质方针及方针阐述如下: DMC Hazardous Substances Policy and its description as below:

保护环境, 守法经营, 全员参与, 预防污染, 持续改进, 永续发展。

DMC is committed to complying with all relevant environmental legislation, regulation and other requirements. All of us shall participate in environmental protection, prevention of pollution and with continual improvement.

保护环境: 保护环境, 实现绿色环保是我们义不容辞的责任。

Environment protection: It is our obligatory responsibility to protect environment and realize green and environmental products.

守法经营: 生产经营过程中遵守绿色环保的法律法规及客户的有害物质过程管理的要求。

Law-abiding: observing laws and regulations related to green environmental and customer HSF requirements during producing and management process.

全员参与: 公司通过建立有害物质管理体系要求, 并在经营活动中要求全体员工参与;

Total involvement: by establishing HSF management system requirement, the company requires total involvement of all staff during producing activities.

预防污染: 在经营活动中通过对有害物质的管控、对各种有害物质进行消减等管理, 最终实现预防污染的目的。

Contamination prevention: achieving contamination prevention by controlling and reducing on hazardous substances during management activities.

持续改进: 通过收集与本公司有害物质管控的适用的法律法规和客户要求, 并有效地应用到管理体系当中, 推进有害物质过程管理体系的持续改进。

Continual improvement: by collecting applicable HSF laws & regulation and customer requirements, and apply them to management system effectively, to promote the continual improvement of HSF management system.

永续发展: 有害物质过程管理体系的建立, 有助于公司更好地履行绿色环保的责任, 确保公司基业长青, 永续发展。

Sustainable development: the establishment of HSF management system can help the company to take green and environmental responsibility better, and achieve its sustainable development.

本公司正式保证从现在开始所有供给 TTM DMC 之用作 PCB 加工之物料和 PCB 包装材料(如适用, 包括 PCB 半成品或成品)完全符合欧盟法规、指令和 DMC 有害物质管理要求。在有要求时, 我们有义务向 DMC 提供相关的证明信息。

This is to formally guarantee that all the materials (including WIP or Finished Goods of PCB if applicable) supplied from now on to TTM DMC for PCB manufacturing and packing all completely conform to EU regulations, directives and TTM DMC's special requirements described below. We are obligated to provide related evidential information to TTM DMC upon request.

1. RoHS 指令: 《关于在电子电气设备中限制使用某些有害物质指令》及 2015/863

Directive 2011/65/EU (RoHS): Restriction of the use of certain hazardous substance in electrical and electronic equipment and 2015/863.

2. REACH 法规: 《化学品的注册、评估、授权和限制使用法规》注: DMC 关注高度关注物质 (ECHA 网站上公布) 和限制物质 (REACH 法规第 17 个附件), 如果我们供应的产品含有这些高度关注物质或限制物质, 我们必须报告给 DMC。

Regulation 1907/2006/EC (REACH): Registration, Evaluation, Authorization and Restriction of Chemicals Remark: TTM DMC focus on SVHC (published on ECHA official web) and Restriction list (REACH regulation Annex XVII). If any product we supply contains any of those prohibited/controlled substances, we must report to TTM DMC.

3. 《关于限制全氟辛烷磺酸盐销售及使用的指令》(2006/122/EC)

Directive 2006/122/EC (PFOS): Restrictions on Marketing and Use of perfluorooctane suffocates

4. Directive 2009/251/EC OJL 32-34, 20.3.2009(DMF) 要求各成员国保证不将含有生物杀灭剂富马酸二甲酯 (DMF) 的产品投放市场或销售该产品的草案, 不含有 DMF。

Directive 2009/251/EC OJL 32-34, 20.3.2009(DMF)

5. IEC62474 电工行业产品的材料声明

具体物质见下方网址:

The latest materials listed in IEC 62474, report the substances that exceed the threshold of this standard, details refer to below website:

<http://std.iec.ch/iec62474>

6. 加州 65 号提案物质清单, 通报超过标准规定的物质, 具体物质见下方网址:

The latest materials listed in Proposition 65 listed substances, report the substances that exceed threshold of this standard, standard details refer to below website:

<https://oehha.ca.gov/proposition-65/proposition-65-list>

7. IEC 61249-2-21 -Halogen Free Requirement 2 / 3 SQAM001-3-B/0 印制板和其他互联结构用材料-无卤要求  
Br<900ppm, Cl<900ppm, Br+Cl<1500ppm

8. 94/62/EC 《关于包装和包装废弃物处理的欧洲议会和理事会指令》

European Parliament and Council Directive on Packaging and Packaging Waste

注: DMC 禁用 PVC、臭氧层消耗物质 (一类和二类的 CFCs 和 HCFCs), 含卤素的塑料或聚合物、Cobalt dichloride。

Note: PVC, Ozone depleting substances (Class I & Class II CFCs and HCFCs), Halogenated plastics or polymers, Cobalt dichloride are prohibited by TTM DMC.

9. 第 1 至 6 条适用于所有的物料, 第 7 条适用于无卤材料, 第 8 条适用于 DMC 的产品使用的包装材料。

Point 1 to 6 are applicable to all materials. Point 7 is only applicable to halogen free materials. Point 8 is only applicable to packing material supplied to TTM DMC.

10. 挥发性有机化合物 (VOC), 厂商必须遵守其营运地区的所有适用的 VOC 法规, 包括但不限于以下法规: GB 30981-2020 工业防护涂料中有害物质限量 GB 33372-2020 胶粘剂挥发性有机化合物限量 GB 38507-2020 油墨中可挥发性有机化合物 (VOCs) 含量的限值 GB 38508-2020 清洗剂挥发性有机化合物含量限值 Volatile Organic Compounds (VOCs), vendors must meet all applicable VOC regulations in the areas in which they are operating. Includes, but is not limited to, the following regulations: GB 30981-2020 Coating-Limit of harmful substances of industrial protective coatings GB 33372-2020 Adhesive-Limit of volatile organic compounds content in adhesive GB 38507-2020 Ink-Limits of volatile organic compounds (VOCs) in printing ink GB 38508-2020 Cleaners-Limits for volatile organic compounds content in cleaning agents

## 11.Others 其他

1) 为 DMC 提供的产品在生产过程中如原材料、产地、包装物、生产设备进行变更时，必须以书面形式通知 DMC 采购部和品质保证部。

Formally inform DMC PUR and Quality Assurance Department immediately when any changes of raw material, manufacturing site, package material, process machine happen.

如本文中英文版本的内容有冲突，则以中文版为准。

If there is any conflicts between Chinese version and English version for this letter, the Chinese version should be prevail.

2) 随后交至 DMC 的所有产品，经检验相关物质未能符合上述规定，导致客户退货或导致 DMC 蒙受相关损失时，本公司愿意承担赔偿责任。

In case that any products delivered to TTM DMC, hereafter, after inspection, are found failure to comply with the above requirements which has caused the rejection of product by TTM DMC customer, or caused TTM DMC finance losses or damages. Our company is responsible for all losses and damages incurred.

3) 提交给我司的所有符合 RoHS 2.0 要求的物料，在其外包装上均需贴上“RoHS”或“GP”的标签，若符合无卤素要求的物料，还需在其外包装上需上“HF 无卤素”标签，否则我司 IQC 或物料仓将作不合格品处理。

Any material meet the RoHS 2.0 requirements must have either “RoHS” or “GP” label on the outer package. All halogen free material must have “HF” label on the outer package, or DMC IQC or warehouse will reject the materials as unconformity products.

4) 所有物料/指定外包过程认可时必须提供《有害物质过程管理及物质限量要求函》、MSDS 及物料第三方测试报告至我司 HSM 小组评审。且每年及时更新第三方测试报告至 DMC，否则 DMC 将送样至第三方测试机构进行有害物质测试，由供应商承担其费用。

The Hazardous Substances Process Management and Substance Restriction Requirement Letter, MSDS and material third party report shall be issued to DMC HSM team for review during new material /process approval. At the same time, your company needs to update the third party report annually in time, or DMC reserves the right to arrange material sample to third party laboratory for testing and charge your firm on related fees.

5) 必须识别并管控产品实现过程存在任何的污染或有害物质的使用，避免任何交叉污染的可能，若含有有害物质的过程或产品存在任何的污染或使用，均需向 DMC 进行申报。

Supplier shall identify the use of hazardous substances or possible contamination in manufacturing process, avoiding the possibility of cross contamination, and declaring to DMC immediately for the use of hazardous substances or possible contamination in manufacturing process.

6) 不能满足此要求的产品必须在附录 1 中声明。

Any non-compliance parts shall be declared in the Appendix 1.

7) 当发现物料生产或产品外包过程存在有害物质限量超标事故时，需采取应急措施，若确认受影响物料或外包产品已发至 DMC，需及时通知 DMC。

When an accident involving the hazardous materials in the material production or product outsourcing process exceed the standard, emergency measures must be taken. The accident situation must been reported to DMC if the affected material or outsourced product has been delivered to DMC.

序号 No.	物料名称 Production Name	申报类型* Declaration types	含有物质 Chemical Substance	CAS 号码 CAS#	含量 Content (ppm)	用途 Purpose	是否有意添加? Intentionally added or not?	是否可消 减或替 代? Can it be reduced or replaced?	完全反应后附 着在 PCB 产 品上的含量 Content in PCB after complete reaction(ppm)

备注：对于外包，此要求函只适用于构成 PCB 产品组成的外包过程，包括压合、电镀、绿油、字符、表面处理过程，其他外包过程不涉及。

Remarks: For outsourcing, this request letter only applies to the outsourcing process that constitutes the PCB product composition, including press-fit, electroplating, green oil, characters, surface treatment processes, the other outsourcing processes are not involved.

本保证书签署后生效，非经 DMC 书面同意，不得自行变更本保证书。且本保证书之效力不因本公司内部变动而受影响。若随后本公司发现本公司提供给 DMC 的产品不能满足以上法律法规的 最新要求，本公司将立即主动告知 DMC。

It is not allowed to change this Guarantee without prior consent in writing from TTM DMC; this guarantee will not be affected under the circumstances of our company internal change. If we find the products we supplied to TTM DMC no longer comply with the latest requirements of the above regulations/directives in the future, we will inform TTM DMC immediately.

Supplier Name:

供应商公司名称

Location:

地址

Signature

Title

签名

职位

Printed Name

Date

印刷体名字

日期

Company Seal

公司印章