



测试报告
(SVHC)

No. GZ1002015621/CHEM

日期: 2010年3月8日

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杭州士兰集成电路有限公司
杭州(下沙)经济开发区东区 10 号路 308 号

委托检验的样品及客户对样品的说明如下:管芯

SGS 工作编号 : GZ12396155EC
SGS 内部编号 : 2.2
样品接收日期 : 2010年2月24日
测试周期 : 2010年2月24日 - 2010年3月8日

测试要求: 根据客户要求, 测试如下高关注物质:
基于欧洲化学品管理署于 2008 年 10 月 28 日和 2010 年 1 月 13 日公布的供授权审议的 29 种高关注物质候选清单 (根据欧盟第 1907/2006 号 REACH 法规以及 67/548/EEC 于 2008 年 12 月 16 日的最新修订 - 第 31 次技术进步改编)

测试结果: 见后续页

结果概述:

根据具体的测试范围和分析技术, 委托样品中高关注物质的含量都低于 0.1%。	通过
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通标标准技术服务有限公司
授权签名

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部门高级主管

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测试样品:

样品描述: “管芯”

测试方法:

SGS 实验室内部方法 RSTS-EE-SVHC-002, ICP-OES, GC/MS, GC/ECD, IC 和 UV-VIS 分析。

备注:

1. 本报告所涉及的高关注物质的化学分析是基于如下欧洲化学品管理局公布的 SVHC 相关文件, 利用现有的分析技术所完成的。
 - A. http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp
 - B. http://echa.europa.eu/consultations/authorisation/svhc/svhc_cons_en.asp
 - C. 这个清单目前正在处于评估阶段, 将来可能会有所改变。
2. 根据欧盟第 1907/2006 (EC) 号法规, 如果满足以下两个条件, 如果物质符合第 57 条中的标准并根据第 59 条第一款被确定, 物品的任何制造商或进口商应根据第 7 条第 4 款向欧盟化学品管理署进行通报: (a) 物质在物品中的总含量超过 1 吨/年/生产商或进口商; (b) 物质在物品中的总含量以质量分数计超过 0.1% 的浓度。
3. 欧盟第 1907/2006 (EC) 号法规第 33 条规定, 含有满足第 57 条中的标准并根据第 59 条第一款被确定且质量分数大于 0.1% 的物质的物品的所有供应商应向物品接受者提供其可获取的充足信息, 以使物品使用安全, 这些信息至少包括物质的名称。
4. 如果样品中 SVHC 的测试结果超过检测限, 建议客户进一步定量分析检测含有 SVHC 的组分并且得到 SVHC 物质的准确浓度。

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测试结果: (欧洲化学品管理署于2008年10月28日公布的供授权审议的15种高关注物质候选清单)

物质名称	CAS 编号	EC 编号	浓度(%)	报告限(%)
C10-13 氯代烃(短链氯化石蜡)	85535-84-8	287-476-5	ND	0.01
蒽	120-12-7	204-371-1	ND	0.005
2,4,6-三硝基-5-叔丁基间二甲苯 (二甲苯麝香)	81-15-2	201-329-4	ND	0.005
邻苯二甲酸二丁酯 (DBP)	84-74-2	201-557-4	ND	0.005
4,4'-二氨基二苯甲烷 (MDA)	101-77-9	202-974-4	ND	0.005
邻苯二甲酸丁苄酯 (BBP)	85-68-7	201-622-7	ND	0.005
邻苯二甲酸二(2-乙基己基)酯 (DEHP)	117-81-7	204-211-0	ND	0.005
六溴环十二烷(HBCDD) 及其非对映异构体 (α -HBCDD, β -HBCDD, γ -HBCDD)	25637-99-4 and 3194-55-6 (134237-50-6, 134237-51-7, 134237-52-8)	247-148-4 and 221-695-9	ND	0.005
氧化双三丁基锡 (TBTO)*	56-35-9	200-268-0	ND	0.005
二氯化钴*	7646-79-9	231-589-4	ND	0.005
五氧化二砷*	1303-28-2	215-116-9	0.080	0.005
三氧化二砷*	1327-53-3	215-481-4	0.069	0.005
三乙基砷酸酯*	15606-95-8	427-700-2	ND	0.005
酸式砷酸铅*	7784-40-9	232-064-2	ND	0.005
重铬酸钠*	10588-01-9	234-190-3	ND	0.005

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测试结果: (欧洲化学品管理署于2010年01月13日公布的供授权审议的14种高关注物质候选清单)

物质名称	CAS 编号	EC 编号	浓度(%)	报告限(%)
2,4-二硝基甲苯	121-14-2	204-450-0	ND	0.005
二异丁基邻苯二甲酯	84-69-5	201-553-2	ND	0.005
磷酸三(2-氯乙基)酯	115-96-8	204-118-5	ND	0.005
葱油 [®]	90640-80-5	292-602-7	ND	0.050
葱油, 葱糊, 轻油 [®]	91995-17-4	295-278-5		
葱油, 葱糊, 葱馏分 [®]	91995-15-2	295-275-9		
葱油, 含葱量少 [®]	90640-82-7	292-604-8		
葱油, 葱糊 [®]	90640-81-6	292-603-2		
沥青, 煤焦油, 高温 [®]	65996-93-2	266-028-2	ND	0.050
硅酸铝耐火陶瓷纤维*	650-017-00-8 (索引编号)	-	ND	0.005
氧化锆硅酸铝耐火陶瓷纤维*	650-017-00-8 (索引编号)	-	ND	0.005
铅铬黄 (C.I. 颜料黄 34)*	1344-37-2	215-693-7	ND	0.005
钼铬红 (C.I. 颜料红 104)*	12656-85-8	235-759-9	ND	0.005
铬酸铅*	7758-97-6	231-846-0	ND	0.005

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注解:

1. 所有报告限是基于均一材质分析得出。
2. ND = 未检出 (低于报告限)
3. * 二氯化钴浓度是基于 ICP-OES 测得钴元素的结果和 IC 测得氯离子的结果。

五氧化二砷, 三氧化二砷, 酸式磷酸铅和三乙基磷酸酯浓度都是基于 ICP-OES 测得重金属的检测结果 (例如砷、铅)

重铬酸钠(CAS 号: 10588-01-9)的浓度是基于 ICP-AES 测得钠元素的结果和分光光度法测得六价铬的结果。2008年12月16日最新修订的 67/548/EEC 中, 二水合重铬酸钠 (CAS 号: 7789-12-0) 不被列为 SVHC。

氧化双三丁基锡 (TBTO) 浓度是用 TLC 方法确认后, 基于 ICP-OES 测得锡元素的结果。

铅铬黄 (C.I. 颜料黄 34), 钼铬红 (C.I. 颜料红 104), 铬酸铅的浓度是基于 ICP-OES 测得铅, 钼, 铬元素的结果。

硅酸铝耐火陶瓷纤维, 氧化锆硅酸铝耐火陶瓷纤维的浓度是基与 ICP-OES 测得的硅, 铝, 锆元素的结果。

建议客户通过检查物品的化学配方来进一步确认物品中是否存在上述金属化合物。

报告限 = 0.005% 是基于所选元素或/和离子的检测限 (例如: 锡、钴、氯、砷、铅、钠、铬和六价铬, 硅, 铝, 锆), 元素钼的检测限 = 0.0005%

- 4 [®] 此高关注物质属于 REACH 法规中定义的 UVCB 物质 (组分不可知且多样化, 复杂反应产物或生物原料的物质), 试验结果是基于每个高关注物质所选定的标识物的测试结果计算得出。每个葱油或煤油的报告值都是基于最坏的情况累计总和所得。
5. 本测试报告内容是参照报告编号为 GZ1002015620/CHEM 的中文译本, 中英文版本如有歧异, 概以英文版为准。

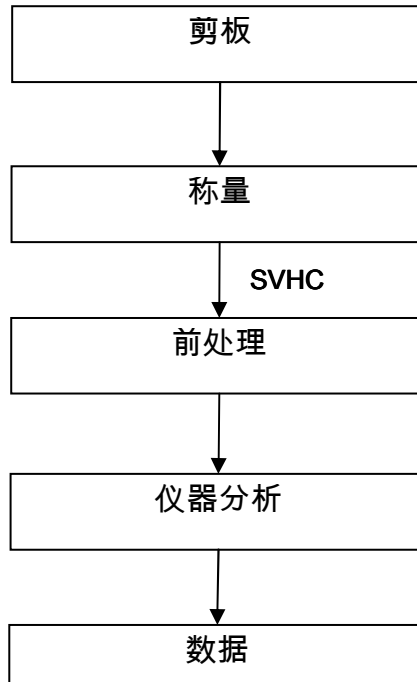
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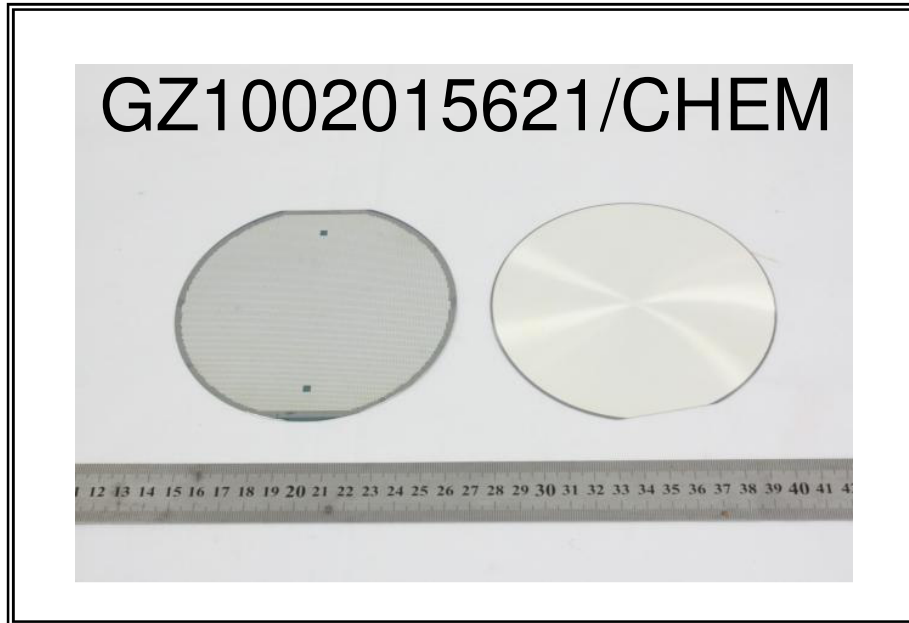
测试流程图



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样品图片:



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