

测试报告 No. CANEC2005716402 日期: 2020年05月06日 第1页,共10页

威迪电子(东莞)有限公司 中国东莞市寮步镇新旧围龙泉工业区

以下测试之样品是由申请者所提供及确认: 盒装金属膜电容器

SGS工作编号: CP20-017856 - SZ 型号: MPX/MEX(X1,X2)

客户参考信息: MPC,MEC,MEB,MCB(CBB61-S0/S3),MMC,MXJ,MIT,MC4

料号: MPX/MEX(X1,X2)

样品接收日期: 2020年04月23日

2020年04月23日 - 2020年04月28日 测试周期:

测试要求: 根据客户要求测试 测试方法: 请参见下一页

结论: 基于所送样品进行的测试,镉、铅、汞、六价铬、多溴联苯(PBBs)、多溴二苯

> 醚(PBDEs)、邻苯二甲酸酯(如邻苯二甲酸二丁酯 (DBP)、邻苯二甲酸丁苄 酯(BBP)、邻苯二甲酸二(2-乙基己基)酯(DEHP)和邻苯二甲酸二异丁酯(DIBP))的 测试结果符合欧盟RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863的限值

要求。

请参见下一页

通标标准技术服务有限公司广州分公司 授权签名

史丽兰

Violet,Shi 史丽兰 批准签署人

测试结果:





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测试报告 No. CANEC2005716402 日期: 2020年05月06日 第2页,共10页

测试结果:

### 测试样品描述:

样品编号	SGS样品ID	描述
SN1	CAN20-057164.001	带灰色表层的无色透明膜
SN2	CAN20-057164.002	黄色物料
SN3	CAN20-057164.003	带黑色印字的黄色塑料
SN4	CAN20-057164.004	带银色表层的黄色物料
SN5	CAN20-057164.005	银色金属

#### 备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 ( < MDL )
- (4) "-" = 未规定

## RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863

测试方法: 参考IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 和 IEC 62321-8:2017, 采用 ICP-OES, UV-Vis 和 GC-MS 进行分析.

测试项目	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>001</u>	<u>002</u>	<u>003</u>
镉 (Cd)	100	mg/kg	2	ND	ND	ND
铅 (Pb)	1,000	mg/kg	2	ND	ND	4
汞 (Hg)	1,000	mg/kg	2	ND	ND	ND
六价铬(Cr(VI))	1,000	mg/kg	8	ND	ND	ND
多溴联苯之和(PBBs)	1,000	mg/kg	-	ND	ND	ND
一溴联苯	-	mg/kg	5	ND	ND	ND
二溴联苯	-	mg/kg	5	ND	ND	ND
三溴联苯	-	mg/kg	5	ND	ND	ND
四溴联苯	-	mg/kg	5	ND	ND	ND
五溴联苯	-	mg/kg	5	ND	ND	ND
六溴联苯	-	mg/kg	5	ND	ND	ND
七溴联苯	-	mg/kg	5	ND	ND	ND
八溴联苯	-	mg/kg	5	ND	ND	ND
九溴联苯	-	mg/kg	5	ND	ND	ND
十溴联苯	-	mg/kg	5	ND	ND	ND
多溴二苯醚之和(PBDEs)	1,000	mg/kg	-	ND	ND	ND



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测试报告	No. CANEC20057164	02	日期: 2	2020年05月06日	第3页	页,共10页
测试项目	<u>限值</u>	单位	MDL	<u>001</u>	<u>002</u>	<u>003</u>
一溴二苯醚	-	mg/kg	5	ND	ND	ND
二溴二苯醚	-	mg/kg	5	ND	ND	ND
三溴二苯醚	-	mg/kg	5	ND	ND	ND
四溴二苯醚	-	mg/kg	5	ND	ND	ND
五溴二苯醚	-	mg/kg	5	ND	ND	ND
六溴二苯醚	-	mg/kg	5	ND	ND	ND
七溴二苯醚	-	mg/kg	5	ND	ND	ND
八溴二苯醚	-	mg/kg	5	ND	ND	ND
九溴二苯醚	-	mg/kg	5	ND	ND	ND
十溴二苯醚	-	mg/kg	5	ND	ND	ND
邻苯二甲酸二丁酯 (DBP)	1,000	mg/kg	50	ND	ND	ND
邻苯二甲酸丁苄酯(BBP)	1,000	mg/kg	50	ND	ND	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	1,000	mg/kg	50	ND	ND	ND
邻苯二甲酸二异丁酯(DIBP)	1,000	mg/kg	50	ND	ND	ND
测试项目	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>004</u>		
镉 (Cd)	100	mg/kg	2	ND		
铅 (Pb)	1,000	mg/kg	2	5		
汞 (Hg)	1,000	mg/kg	2	ND		
六价铬(Cr(VI))	1,000	mg/kg	8	ND		
多溴联苯之和(PBBs)	1,000	mg/kg	-	ND		
一溴联苯	-	mg/kg	5	ND		
二溴联苯	-	mg/kg	5	ND		
三溴联苯	-	mg/kg	5	ND		
四溴联苯	-	mg/kg	5	ND		
五溴联苯	-	mg/kg	5	ND		
六溴联苯	-	mg/kg	5	ND		
七溴联苯	-	mg/kg	5	ND		
八溴联苯	-	mg/kg	5	ND		
九溴联苯	-	mg/kg	5	ND		
十溴联苯	-	mg/kg	5	ND		
多溴二苯醚之和(PBDEs)	1,000	mg/kg	-	ND		
一溴二苯醚	-	mg/kg	5	ND		
二溴二苯醚	-	mg/kg	5	ND		
三溴二苯醚	-	mg/kg	5	ND		
四溴二苯醚	-	mg/kg	5	ND		
五溴二苯醚	-	mg/kg	5	ND		
六溴二苯醚	-	mg/kg	5	ND		
七溴二苯醚	-	mg/kg	5	ND		



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测试报告 No. CANEC2005716402 日期: 2020年05月06日 第4页,共10页

<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>004</u>
八溴二苯醚	-	mg/kg	5	ND
九溴二苯醚	-	mg/kg	5	ND
十溴二苯醚	-	mg/kg	5	ND
邻苯二甲酸二丁酯 (DBP)	1,000	mg/kg	50	ND
邻苯二甲酸丁苄酯(BBP)	1,000	mg/kg	50	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	1,000	mg/kg	50	ND
邻苯二甲酸二异丁酯(DIBP)	1,000	mg/kg	50	ND

#### 备注:

- (1)最大允许极限值引用自RoHS指令(EU) 2015/863 。IEC 62321系列等同于 EN 62321系列 https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP ORG ID,FSP LANG ID:1258 637.25
- (2) 2021年7月22号开始, DEHP, BBP, DBP 和 DIBP的限制适用于医疗器械,包括体外医疗器械,监控仪 表,包括工业监测和控制仪器。
- (3) DEHP, BBP, DBP 和 DIBP的限制不适用于玩具产品,因为No.1907/2006附录XVII第51条已对玩具产品 中的DEHP, BBP, DBP 和 DIBP含量进行了限制。

## RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863

测试方法: 参考IEC 62321-4:2013+A1:2017, IEC62321-5:2013, IEC 62321-7-1:2015, 采用 ICP-OES 和 UV-Vis 进行分析.

测试项目	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>005</u>
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1,000	mg/kg	2	ND
汞 (Hg)	1,000	mg/kg	2	ND
六价铬(Cr(VI))▼	-	μg/cm²	0.10	ND

#### 备注:

(1) 最大允许极限值引用自RoHS指令(EU) 2015/863。

IEC 62321系列等同于 EN 62321系列

https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP\_ORG\_ID,FSP\_LANG\_ID:12586 37.25

- (2) ▼=a. 当六价铬的浓度高于0.13 µg/cm²时,样品为阳性,即含有六价铬;
  - b. 当六价铬的浓度为ND(低于0.10 μg/cm²)时,样品为阴性,即未检测到六价铬;
  - c. 当六价铬的浓度介于0.10 μg/cm²与0.13 μg/cm²之间时,无法直接判定是否检测到六价铬, 因不同个体的样品表面差异可能会影响测定结果:

由于未获知样品的存储条件和生产日期,样品的六价铬测试结果仅能代表测试时样品含六 价铬的状态。

除非另有说明,此报告结果仅对测试的样品负责。本报告未经本公司书面许可,不可部分复制。



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No. CANEC2005716402

日期: 2020年05月06日 第5页,共10页

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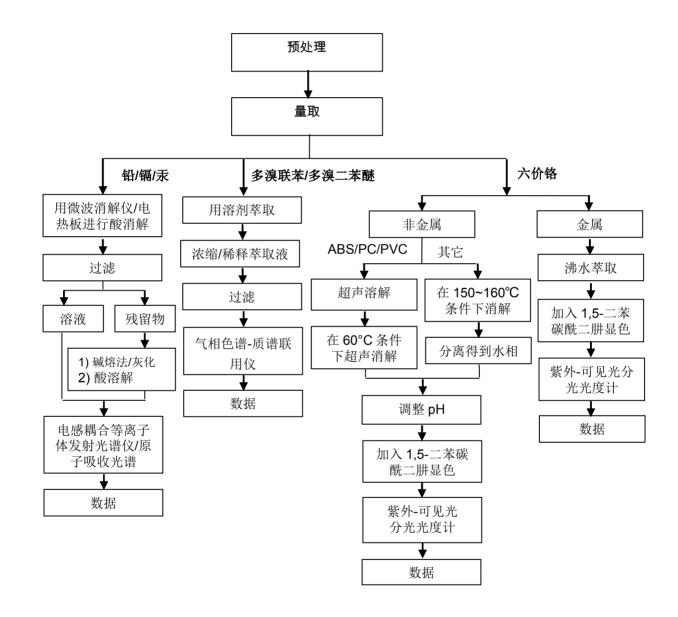
No. CANEC2005716402

日期: 2020年05月06日 第6页,共10页

### 附件

## Pb/Cd/Hg/Cr6+/PBBs/PBDEs 测试流程图

1) 样品按照下述流程被完全消解(六价铬和多溴联苯/多溴二苯醚测试除外)。





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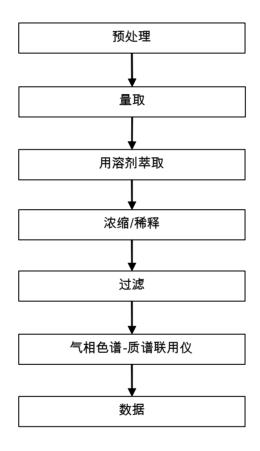


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日期: 2020年05月06日 第7页,共10页

附件

## Phthalates 测试流程图





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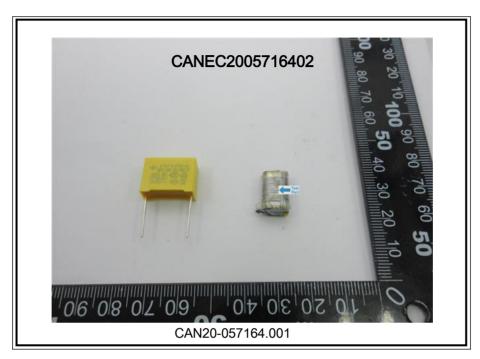


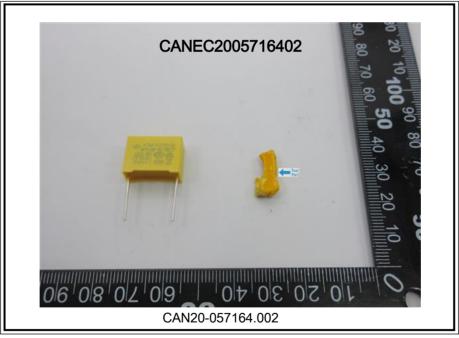
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样品照片:







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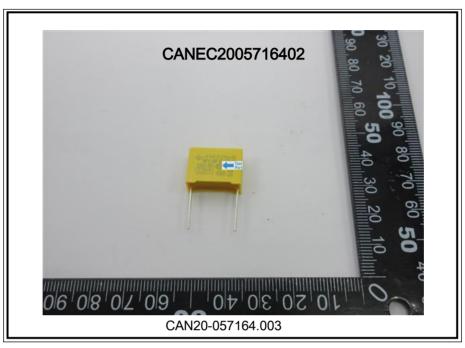
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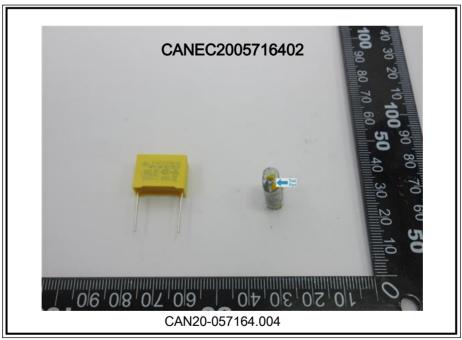
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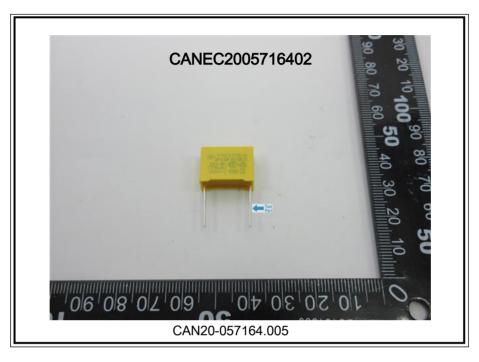
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