

测试报告 No. CANML1706463801 日期: 2017年04月21日 第1页,共6页

广州厚洹化学助剂有限公司 中国广州市增城仙村镇蓝山村上访一社石新路旁

以下测试之样品是由申请者所提供及确认:HD2008水性石墨烯分散剂

SGS工作编号: GZIN1704015812PC - GZ

制造商: 广州厚洹化学助剂

样品接收日期: 2017年04月17日

2017年04月17日 - 2017年04月21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

测试结果: 请参见下一页

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 结论:

醚(PBDEs)的测试结果不超过欧盟RoHS指令2011/65/EU附录II的修正指令(EU)

2015/863的限值要求。

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美色盃

Zm guan关正孟 批准签署人

备注: 根据客户申请, SGS出具了此中文报告, 英文版本可根据客户要求提供. (The Chinese test report is issued according to the applicant's request. The English version is available from SGS if further needed)



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测试结果:

# 测试样品描述:

样品编号 SGS样品ID 描述 SN1 CAN17-064638.001 黄色液体

备注:

(1) 1 mg/kg = 1 ppm = 0.0001%

(2) MDL = 检测极限值

(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: (1)参考IEC 62321-5:2013,用ICP-OES测定镉的含量。

(2)参考IEC 62321-5:2013,用ICP-OES测定铅的含量。

(3)参考IEC 62321-4:2013,用ICP-OES测定汞的含量。

(4)参考IEC 62321-7-2:2017, 用UV-Vis分析六价铬含量和/或者参考IEC

62321-5:2013,用ICP-OES测试总铬含量。

(5)参考IEC 62321-6:2015,用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚)的含量。

测试项目	限值	<u>单位</u>	<u>MDL</u>	<u>001</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))	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



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4、144.4点

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<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>001</u>	
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	
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	

#### 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http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP ORG ID.FSP LANG ID:125 8637,25
- (2) 检测的铬(Cr)含量是"ND",则六价铬(Cr(VI))含量也是"ND",不需要进行六价铬(Cr(VI))的确认性测试。
- (3) 若铬(Cr)含量超过六价铬(Cr(VI))方法检出限,需要进行六价铬(Cr(VI))的确认性测试。
- (4) 2015年6月4号发表在欧盟官方杂志(官方公报)上的RoHS指令(EU) 2015/863附录II限值中还包括邻苯 二甲酸酯BBP, DBP, DEHP和DBP。新的指令限制了电子电器产品的每一个均一材质中邻苯二甲酸酯含 量不得超过0.1%。
- (5) 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。
- (6) DEHP, BBP, DBP 和 DIBP的限制不适用于2019年7月22日前投放市场的电缆及电子电气产品中用于维 修、重复利用、功能更新及容量提升的备用配件以及2021年7月22日前投放市场的医疗器械,包括体外医 疗器械, 监控仪表, 包括工业监测和控制仪器。
- (7) DEHP、BBP 和 DBP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 和 DBP含量进行了限制。

# 挥发性有机物含量(溶剂萃取法)

测试方法: 参考SGS内部方法(GZTC CHEM-TOP-050-14),分析仪器为气相色谱/质谱仪。

测试项目	CAS NO.	<u>单位</u>	<u>MDL</u>	<u>001</u>
苯	71-43-2	ma/ka	5	ND

### 甲醛

SGS内部方法(GZTC CHEM-TOP-059-03)测定,用UV-Vis分析。 测试方法:



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备注: 所示结果为湿样品总重量中的含量。



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# 测试报告

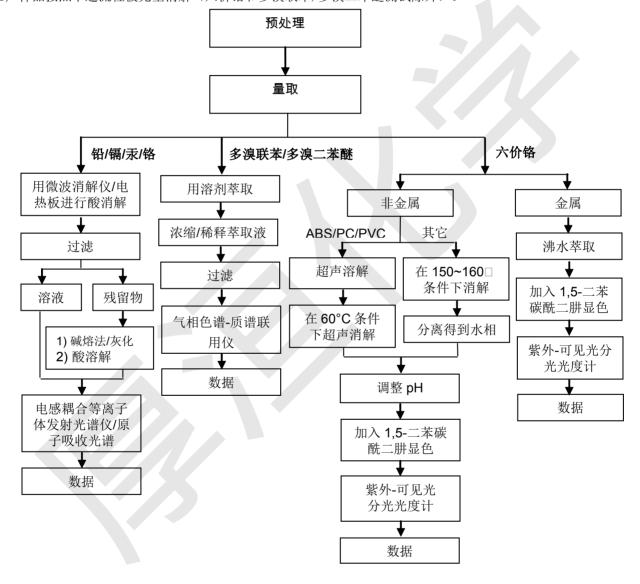
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# 附件

# RoHS 测试流程图

- 1) 分析人员: 张梓路 / 胡香云
- 2) 项目负责人: 汪丹 / 刘琼
- 3) 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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