

No. SHAEC1828090516

日期: 2019年01月10日 第1页,共8页

宝山钢铁股份有限公司青山基地 湖北省武汉市青山区厂前

以下测试之样品是由申请者所提供及确认:热镀锌无铬钝化板

SGS工作编号: SP18-041523 - SH

样品接收日期: 2018年12月18日

测试周期: 2018年12月18日 - 2018年12月24日

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

基于所送样品的指定部位进行的测试,镉、铅、汞、六价铬、多溴联 结论:

> 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。

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Helen Liu 刘海鹏 报告审核员



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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 银色金属板 SHA18-280905.010 SN2 SHA18-280905.011 银色金属板

#### 备注:

(1) 1 mg/kg = 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+AMD1:2017 , IEC 62321-5:2013 , IEC 62321-7-1:2015 , 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>	单位	<u>MDL</u>	<u>010</u>
镉(Cd)	100	mg/kg	10	ND
铅(Pb)	1000	mg/kg	10	32
汞(Hg)	1000	mg/kg	10	ND
六价铬(Cr(VI))▼	-	μg/cm²	0.10	ND
多溴联苯(PBBs)之和	1000	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)	1000	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



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<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>010</u>
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
邻苯二甲酸二丁酯 (DBP)	1000	mg/kg	50	ND
邻苯二甲酸丁苄酯(BBP)	1000	mg/kg	50	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	1000	mg/kg	50	ND
邻苯二甲酸二异丁酯(DIBP)	1000	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

http://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。

### 全氟辛烷磺酰基化合物(PFOS)和全氟辛酸(PFOA)

测试方法: 参照US EPA 3550C: 2007 方法测定, 采用HPLC-MS进行分析.

<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>011</u>
全氟辛烷磺酸(PFOS)及衍生物^	1	μg/m²	1	ND
全氟辛酸(PFOA)	-	μg/m²	1	ND

#### 备注:

- (1) 最大允许限制引用自(EC) No. 850/2004 的修订指令欧盟决议(EU) No. 757/2010.
- (2) ^=全氟辛烷磺(PFOS)及其衍生物包含全氟辛烷磺酸(PFOS), 全氟辛基磺酰胺(PFOSA), 2-(N-乙基全氟辛基磺酰胺)乙醇(EtFOSE), N-甲基全氟辛烷磺酰胺(MeFOSA), N-乙基全氟辛烷磺酰胺(EtFOSA)和2-(N-甲基全氟辛基磺酰胺)乙醇(MeFOSE)。

检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的,仅供内部参考。



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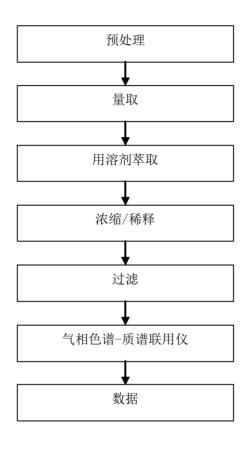


附件

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## Phthalates 测试流程图





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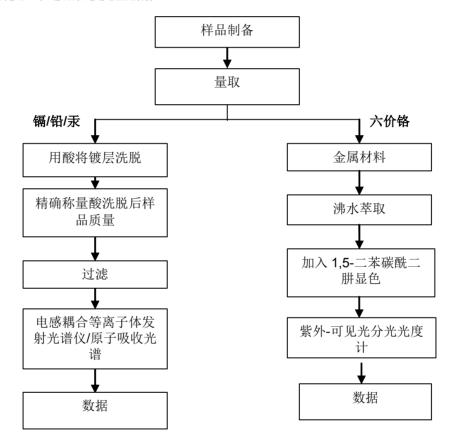
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附件

# 镀层 Pb/Cd/Hg/Cr6+测试流程图

1)被洗下来的镀层按照下述流程被完全消解





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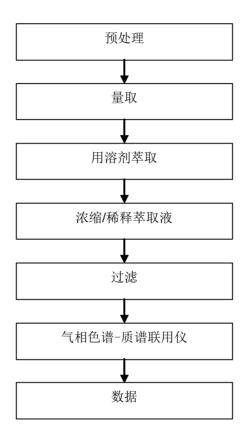


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附件

## PBBs/PBDEs 测试流程图





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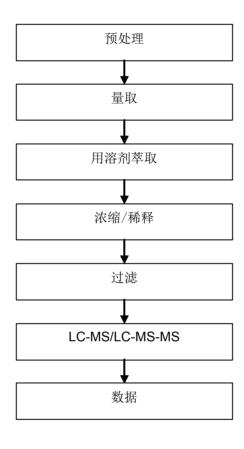


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### PFOS/PFOA 测试流程图





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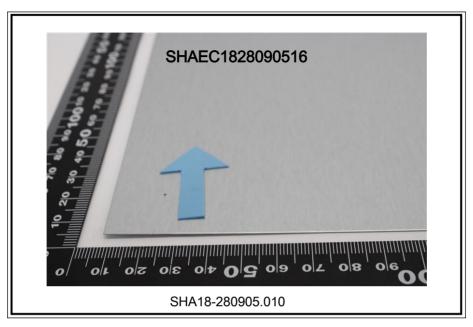
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