

## 测试报告

No. SHAEC1908484346

日期: 2019年05月08日 第1页,共8页

宝山钢铁股份有限公司宝山基地  
上海市宝山区漠河路151号

以下测试之样品是由申请者所提供及确认: 热镀锌(锌铁合金)无铬钝化

SGS工作编号: SP19-014044 - SH

样品接收日期: 2019年04月28日

测试周期: 2019年04月28日 - 2019年05月06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

结论: 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)、邻苯二甲酸丁苯酯(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。

通标标准技术服务(上海)有限公司  
授权签名

Helen Liu 刘海鹏  
报告审核员



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## 测试报告

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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	SHA19-084843.041	银色金属板
SN2	SHA19-084843.042	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, AAS, UV-Vis和GC-MS进行分析。

测试项目	限值	单位	MDL	041
镉(Cd)	100	mg/kg	10	ND
铅(Pb)	1000	mg/kg	10	13
汞(Hg)	1000	mg/kg	10	ND
六价铬(Cr(VI))▼	-	µg/cm <sup>2</sup>	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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测试项目	限值	单位	MDL	041
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](http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID) , FSP\_LANG\_ID:1258637, 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.

测试项目	限值	单位	MDL	042
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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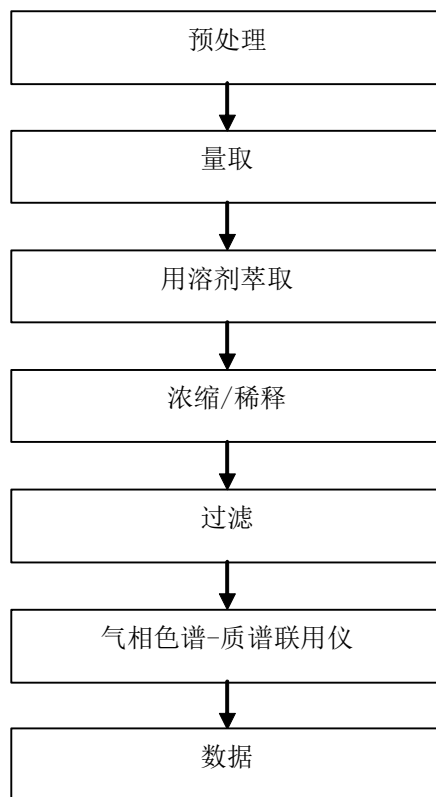
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## Phthalates 测试流程图



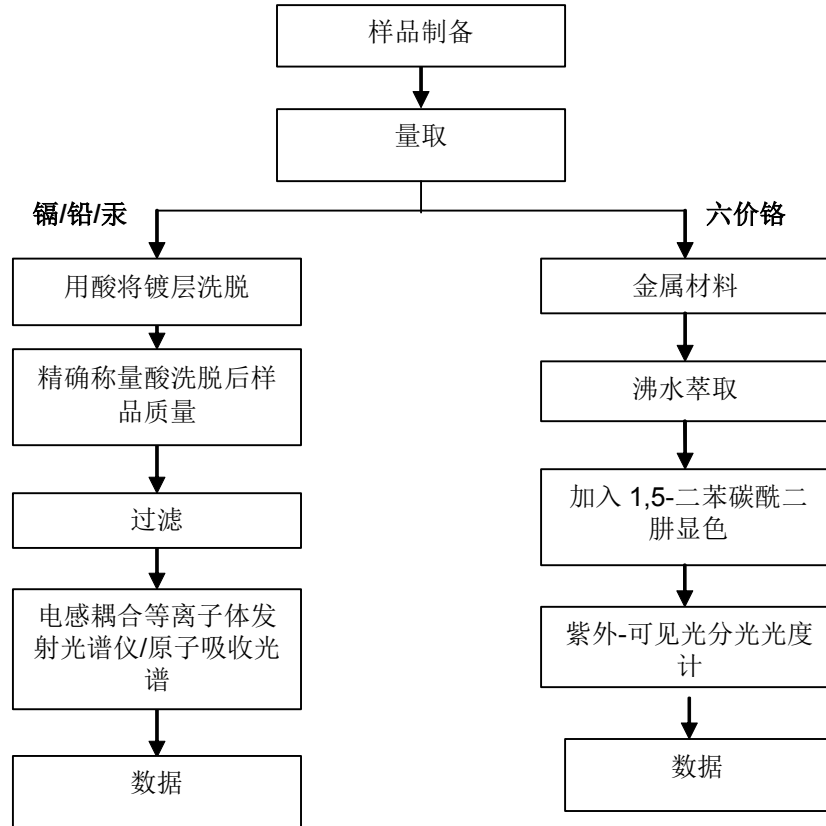
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附件

## 镀层 Pb/Cd/Hg/Cr<sup>6+</sup>测试流程图

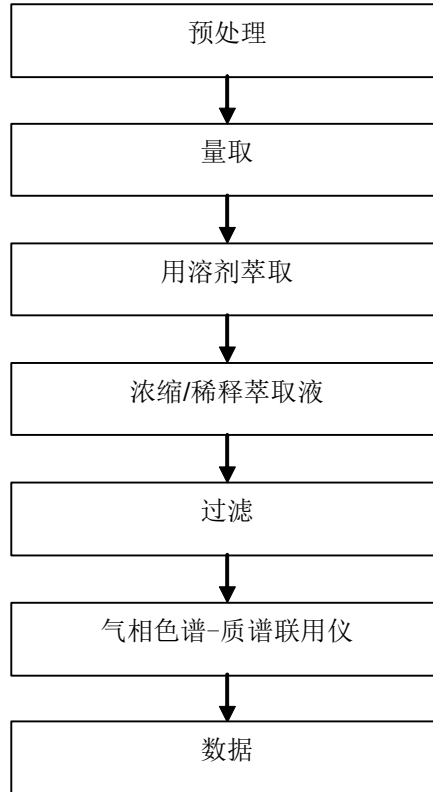
1)被洗下来的镀层按照下述流程被完全消解



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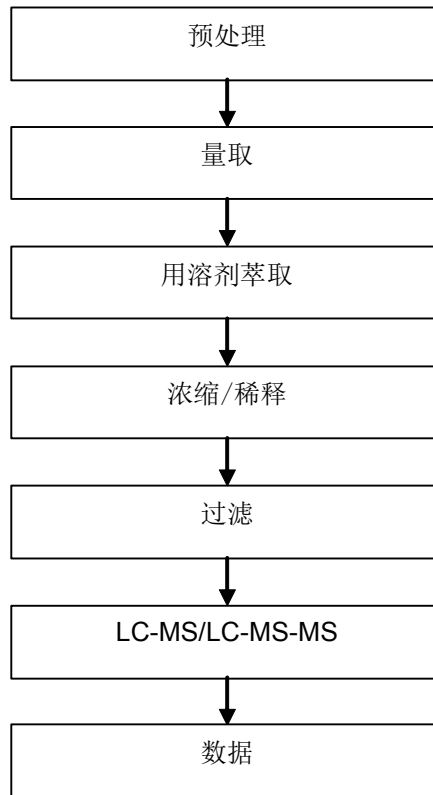
### PBBs/PBDEs 测试流程图



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## PFOS/PFOA 测试流程图



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