

No. SHAEC1828090506

日期: 2019年01月10日 第1页,共7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:冷轧板(涂油)(包括轧硬状态)

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

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

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。

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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e sgs.china@sgs.com



测试报告 No. SHAEC1828090506 日期: 2019年01月10日 第2页.共7页

测试结果:

### 测试样品描述:

样品编号 SGS样品ID 描述 银色金属板 SN<sub>1</sub> SHA18-280905.003

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。

<u>测试项目</u>	限值	<u>单位</u>	<u>MDL</u>	<u>003</u>
镉 (Cd)	100	mg/kg	2	ND
铅(Pb)	1000	mg/kg	2	ND
汞 (Hg)	1000	mg/kg	2	ND
六价铬(Cr(VI))▼	-	µg/cm²	0.10	ND
多溴联苯之和(PBBs)	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
四溴二苯醚	-	mg/kg	5	ND



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93页,共7页
<b>3</b> 页

<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>003</u>
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: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 $0.10 \, \mu g/cm^2$ 与 $0.13 \, \mu g/cm^2$ 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>003</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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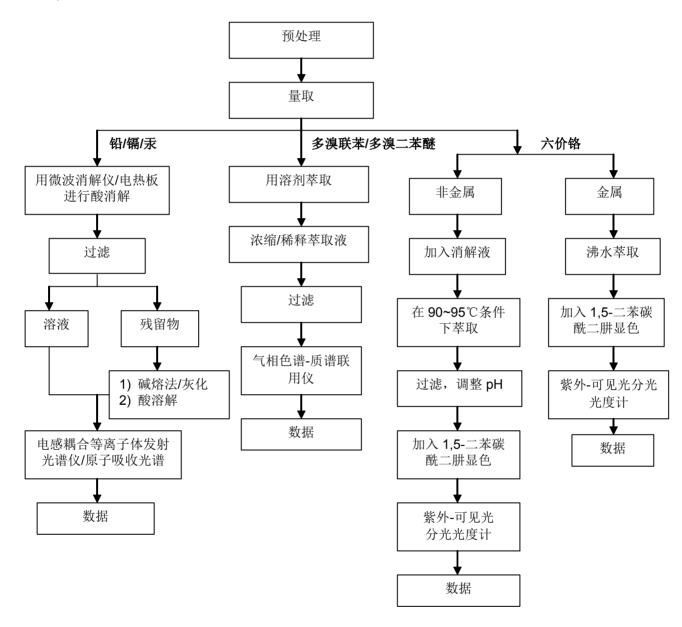
No. SHAEC1828090506

日期: 2019年01月10日 第4页.共7页

附件

# Pb/Cd/Hg/Cr<sup>6+</sup>/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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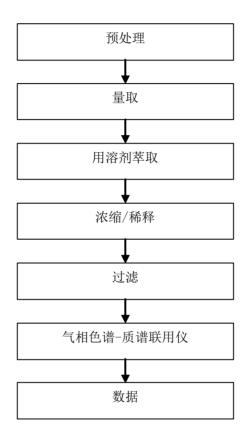


附件

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## Phthalates 测试流程图





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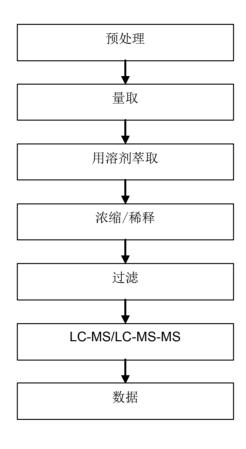


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## PFOS/PFOA 测试流程图





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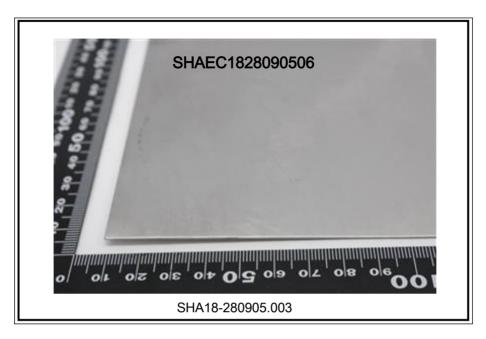
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