

Test Report

No. SH8022450-1/ CHEM

Date: Jun. 4, 2008

Page 1 of 5

公司名称: 上海宝山钢铁股份有限公司

Company Name: SHANGHAI BAOSHAN IRON & STEEL CO., LTD

地址: 上海同济路 1800 号

Address: 6/F, 1800 TONGJI RD, BAOSHAN, SHANGHAI, CHINA

THIS REPORT IS TO SUPERSEDE TEST REPORT NO.SH8022450/CHEM DATE: 2008/03/20

样品名称: 热镀锌涂油

TYPE OF PRODUCT: CONTINUOUSLY HOT-DIP ZINC COATED STEEL SHEET & STRIP, OILING

SGS 相关号: 10869348-14

SGS Ref No.: 10869348-14

收件日期(SAMPLE RECEIVED). Feb. 27, 2008

测试日期(TESTING DATE). Feb.27 to Mar.05, 2008; Mar.17-20,2008

- Test Requested/测试要求 : (1) To determine the Cadmium, Lead and Mercury content of the plating for submitted sample.
测定委托样品镀层中镉, 铅, 汞的含量
- (2) To determine the Hexavalent Chromium content of the plating for submitted sample.
测定委托样品镀层中六价铬的含量
- (3) To determine the PFOS (Perfluorooctane Sulfonates) and PFOA (Perfluorooctanoic Acid) content of the plating for submitted sample.
测定委托样品镀层中全氟辛烷磺酰基化合物(PFOS) 和全氟辛酸(PFOA)的含量

试验方法/测试结果 : 见后续页

Test method/Test Results: Please refer to next page

Signed for and on behalf of
SGS-CSTC Chemical Laboratory



Ella Zhang
Section Manager

Signed for and on behalf of
SGS-CSTC Chemical Laboratory



Sandy Hao
Lab Manager

Test Report

No. SH8022450-1/ CHEM

Date: Jun. 4, 2008

Page 2 of 5

Test method/测试方法

- : (1) Acid washing method for Cadmium, Lead and Mercury content in plating. Analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometer (ICP-AES) and Atomic Absorption Spectrometer (AAS).
酸洗脱方法测定镀层中的镉,铅和汞含量.
采用ICP和AAS进行分析
- (2) With reference to IEC 62321/2nd CDV (111/95/CDV) for Hexavalent Chromium by spot test / Colorimetric Method.
参照 IEC 62321/2nd CDV (111/95/CDV), 采用点测试法/比色法测定六价铬的含量
- (3) With reference to EPA 3550C: 2000.
Analysis was performed by High Performance Liquid Chromatograph-Mass Spectrometer (HPLC-MS).
参照 EPA 3550C: 2000 方法. 采用 HPLC-MS 测试.

Test results by chemical method

(1)-(2) Cadmium, Lead, Mercury and Hexavalent Chromium content of the plating for submitted sample. (Unit: mg/kg)

样品镀层中镉, 铅, 汞和六价铬的含量(单位: mg/kg)

Test Item(s)/ 测试项目	Method(refer to)/ 方法(参见)	1	MDL
Cadmium (Cd) in plating/ 镀层中镉(Cd)	(1)	ND	10
Lead (Pb) in plating/ 镀层中铅(Pb)		ND	10
Mercury (Hg) in plating/ 镀层中汞(Hg)		ND	10
Hexavalent Chromium (Cr VI)/ 六价铬(Cr VI)	(2)	Negative	See Note (4)/ 参见备注 (4)

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.



SGS Standards Technical Services, Ltd.
Sanghaier Testing Center-Client Laboratory

1/F,7/F,9/F&10/F, the 3rd Building, No.889, Yishan Road, Xuhui District, Shanghai, China 200233 EE t +86 21 64951616*2723 f +86 21 64953679
中国上海 徐汇区宜山路 889 号 3 号楼 1 楼、7 楼、9 楼、10 楼 邮编: 200233 HL t +86 21 64951616*2720 f +86 21 54500353 www.cn.sgs.com

(3) PFOS (Perfluorooctane Sulfonates) and PFOA (Perfluorooctanoic Acid) content of the plating for submitted sample (Unit: ug/m²)

样品镀层中全氟辛烷磺酰基化合物(PFOS) 和全氟辛酸(PFOA)的含量(单位: ug/m²)

Test Item(s)/ 测试项目	Method(refer to)/ 方法(参见)	1	MDL
PFOS (Perfluorooctane Sulfonates) $\Sigma \left\{ \begin{array}{l} \text{PFOS-acid} \\ \text{PFOS-salt} \end{array} \right\}$ 全氟辛烷磺酰基化合物(PFOS) $\Sigma \left\{ \begin{array}{l} \text{PFOS-酸} \\ \text{PFOS-盐} \end{array} \right\}$	(3)	ND	1
PFOA(Perfluorooctanoic Acid) $\Sigma \left\{ \begin{array}{l} \text{PFOA-acid} \\ \text{PFOA-salt} \end{array} \right\}$ 全氟辛酸(PFOA) $\Sigma \left\{ \begin{array}{l} \text{PFOA-酸} \\ \text{PFOA-盐} \end{array} \right\}$		ND	1

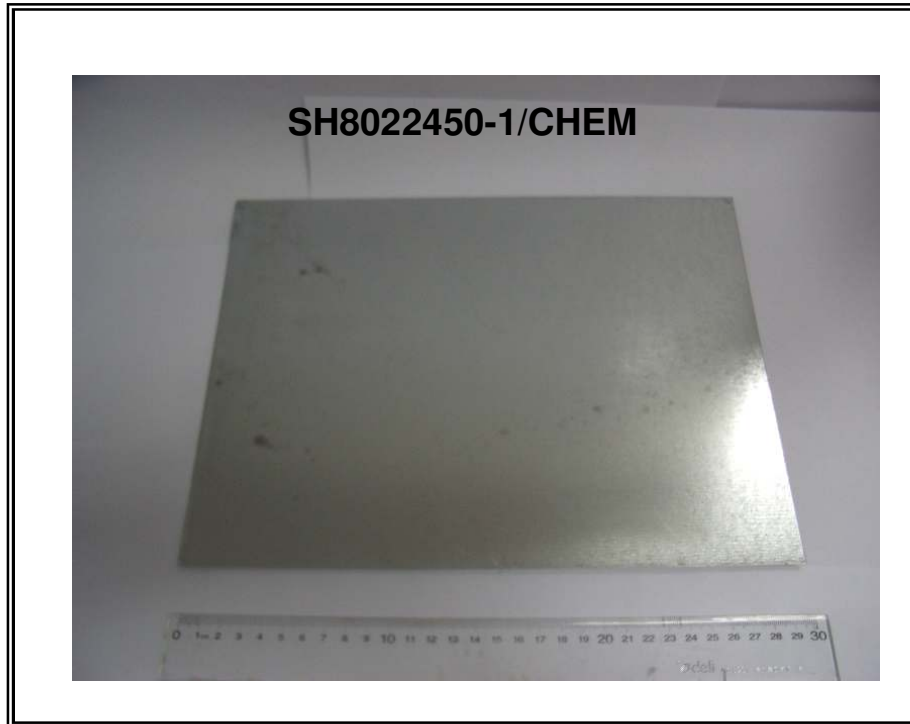
Test Part Description:

1. Silvery metal board

Note :

- (1) mg/kg=ppm
毫克每千克=百万分之一(mg/kg=ppm)
- (2) ND = Not detected
ND=未检出
- (3) MDL = Method Detection Limit
MDL =检测极限值
- (4) Spot-test:
Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;
(The tested sample should be further verified by boiling-water-extraction method if the spot test result is Negative or cannot be confirmed.)
Boiling-water-extraction:
Negative = Absence of CrVI coating
Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.
点测试法:
Negative= 镀层中未检测到六价铬, Positive = 镀层中检测到六价铬;
(当点测试结果为 Negative 或无法确定时,将采用沸水萃取法作进一步的结果验证。)
沸水萃取法:
Negative = 镀层中未检测到六价铬
Positive = 镀层中检测到六价铬; 表明 50 cm² 表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大于 0.02 mg/kg

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.