

TEST REPORT: 7191009562-CHM11-PHS

Date: 17 June 2011

Tel: +65 68851275 Fax: +65 67784301

Client's Ref:

Email: songbai.tang@tuv-sud-psb.sg

Note: This report is issued subject to TÜV SÜD PSB's "Terms and Conditions Governing Technical Services".
The terms and conditions governing the issue of this report are set out as attached within this report.



PSB Singapore

Choose certainty.
Add value.

SUBJECT

Measurement of coating thickness

CLIENT

Bravat Singapore Pte Ltd
1 Commonwealth Lane
#01-10 & 17
Singapore 149544

Attn : Mr. Peter Chen

SAMPLE SUBMISSION DATE

13 April 2011

DESCRIPTION OF SAMPLE

Brand "Bravat" Basin mixer / Model: F112190

DATE OF ANALYSIS

26 April 2011

METHOD OF TEST

Reference to EN ISO 2177 Metallic coatings -- Measurement of coating thickness -- Coulometric method by anodic dissolution



TÜV SÜD PSB

Laboratory:
TÜV SÜD PSB Pte. Ltd.
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: testing@tuv-sud-psb.sg
www.tuv-sud-psb.sg
Co. Reg : 199002667R

Regional Head Office:
TÜV SÜD Asia Pacific Pte. Ltd.
3 Science Park Drive, #04-01/05
The Franklin, Singapore 118223
TUV®

TEST REPORT: 7191009562-CHM11-PHS

17 JUNE 2011



PSB Singapore

RESULTS**Table 1. Brand "Bravat" Basin mixer / Model: F11379C Handle**

Layers of Sample	Brand "Bravat" Basin mixer / Model: F11379C (Micron, μm)	HDB Requirement of Coating Thickness (Micron, μm)	Remarks
Chromium	0.30	0.3 minimum	Pass
Nickel	12.5	10.0 minimum	Pass
Copper	33.7	20.0 minimum	Pass

Note: The thickness value in the table is the average value of the layer.

This product meets the requirement.

Table 2. Brand "Bravat" Basin mixer / Model: F11379C Body

Layers of Sample	Brand "Bravat" Basin mixer / Model: F11379C (Micron, μm)	HDB Requirement of Coating Thickness (Micron, μm)	Remarks
Chromium	0.22	0.3 minimum	Fail
Nickel	7.7	10.0 minimum	Fail

Note: The thickness value in the table is the average value of the layer.

This product does not meet the requirement as both Chromium and Nickel layers fail to meet the minimum specification.

MR. POOI HOW SIANG
TECHNICAL EXECUTIVE

DR TANG SONGBAI
PRODUCT MANAGER
SURFACE ANALYSIS
CHEMICAL & MATERIALS

TEST REPORT: 7191009562-CHM11-PHS

17 JUNE 2011



PSB Singapore

This Report is issued under the following conditions:

1. Results of the testing/calibration in the form of a report will be issued immediately after the service has been completed or terminated.
2. Unless otherwise requested, a report shall contain only technical results. Analysis and interpretation of the results and professional opinion and recommendations expressed thereupon, if required, shall be clearly indicated and additional fee paid for, by the Client.
3. This report applies to the sample of the specific product/equipment given at the time of its testing/calibration. The results are not used to indicate or imply that they are applicable to other similar items. In addition, such results must not be used to indicate or imply that TÜV SÜD PSB approves, recommends or endorses the manufacturer, supplier or user of such product/equipment, or that TÜV SÜD PSB in any way "guarantees" the later performance of the product/equipment.
4. The sample/s mentioned in this report is/are submitted/supplied/manufactured by the Client. TÜV SÜD PSB therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture, consignment or any information supplied.
5. Additional copies of the report are available to the Client at an additional fee. No third party can obtain a copy of this report through TÜV SÜD PSB, unless the Client has authorised TÜV SÜD PSB in writing to do so.
6. TÜV SÜD PSB may at its sole discretion add to or amend the conditions of the report at the time of issue of the report and such report and such additions or amendments shall be binding on the Client.
7. All copyright in the report shall remain with TÜV SÜD PSB and the Client shall, upon payment of TÜV SÜD PSB's fees for the carrying out of the tests/calibrations, be granted a license to use or publish the report to the third parties subject to the terms and conditions herein, provided always that TÜV SÜD PSB may at its absolute discretion be entitled to impose such conditions on the license as it sees fit.
8. Nothing in this report shall be interpreted to mean that TÜV SÜD PSB has verified or ascertained any endorsement or marks from any other testing authority or bodies that may be found on that sample.
9. This report shall not be reproduced wholly or in parts and no reference shall be made by the Client to TÜV SÜD PSB or to the report or results furnished by TÜV SÜD PSB in any advertisements or sales promotion.
10. Unless otherwise stated, the tests are carried out in TÜV SÜD PSB Pte Ltd, No.1 Science Park Drive Singapore 118221.

March 2010



© BRAVATIS