

(Garuda)

Certificate No. 14T118/0200

Certificate of Laboratory Accreditation

By virtue of National Standardization Act B.E. 2551 (2008)

Secretary-General, Thai Industrial Standards Institute

Issue this Certificate for

Thailand Smelting and Refining Company Limited

Laboratory address:

80 Sakdidej road, Moo 8, Vichit, Muang, Phuket

This laboratory is accredited for testing in accordance with
the Thai Industrial Standard TIS 17025-2548 (2005) (ISO/IEC 17025:2005)
General Requirements for the Competence of Testing and Calibration Laboratories.

Accreditation No. TESTING 0245

The scope of accreditation is as annexed hereto.

Issue Date : 24 December B.E. 2557 (2014)

Valid until : 23 December B.E. 2560 (2017)

(Signature)

(Hathai Uthai)

Secretary-General

Thai Industrial Standards Institute

Translation approved



(Mr. Yannapat Uthongsap)

Director,

Office of the National Accreditation Council

Date : 3 February 2015

Date of Initial Issue : 15 January B.E. 2552 (2009)

Ministry of Industry, Thai Industrial Standards Institute



Scope of Accreditation for Testing

Certificate No. : 14T118/0200

Laboratory Name : Thailand Smelting and Refining Company Limited

Address : 80 Sakdidej road, Moo 8, Vichit, Muang, Phuket

Accreditation No. : TESTING 0245

Laboratory Status Permanent Site Temporary Mobile

Field of Tested	Specific Test	Test Method
Civil field 1. Tin metal	<ul style="list-style-type: none"> - Lead 0.011 3 % to 0.112 % by weight - Arsenic 0.003 % to 0.043 % by weight - Bismuth 0.001 6 % to 0.060 % by weight - Copper 0.001 3 % to 0.060 % by weight - Iron 0.000 8 % to 0.016 0 % by weight - Nickel 0.000 4 % to 0.019 2 % by weight - Silver 0.001 8 % to 0.020 9 % by weight - Antimony 0.003 4 % to 0.061 % by weight - Zinc 0.003 4 % to 0.014 6 % by weight - Cadmium 0.001 5 % to 0.010 4 % by weight - Aluminum 0.001 0 % to 0.041 4 % by weight 	<ul style="list-style-type: none"> - In-house method WI-QC25-504-IC-1C-1 based on ASTM E 1251-11

Issue Date : 24 December B.E. 2557 (2014)

Signature

(Hathai Uthai)

Secretary-General, Thai Industrial Standards Institute