



CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

TRONOX KZN SANDS (PTY) LTD

Co. Reg. No.: 1987/001627/07

Facility Accreditation Number: **T0267**

is a South African National Accreditation System accredited facility provided that all conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation, Annexure "A", bearing the above accreditation number for

CHEMICAL AND PHYSICAL ANALYSIS

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2017

The accreditation demonstrates technical competency for a defined scope and the operation of a quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant accreditation symbol to issue facility reports and/or certificates

Mr M Phaloane:
Acting Chief Executive officer

Effective Date: 01 August 2020
Certificate Expires: 31 July 2025



ANNEXURE A
SCHEDULE OF ACCREDITATION

Facility Number: **T0267**

Permanent Address of Laboratory:

Tronox KZN Sands (Pty) Ltd
 R34 Melmoth Road
 Empangeni
 KwaZulu-Natal
 3881

Technical Signatory:

Mr D Raman (All Methods)

Postal Address:

Private Bag X20010
 Empangeni
 3880

Nominated Representative:

Mr Dion Raman

Tel:

Fax: (035) 902 7089

E-mail: dion.raman@tronox.com

Issue No.: 13

Date of Issue: 01 August 2020

Expiry Date: 31 July 2025

Material or Products Tested	Type of Tests/ Properties Measured, Range of Measurement	Standard Specifications, Techniques / Equipment Used
CHEMICAL		
Zircon Final Product	X-ray Fluorence Spectroscopy: ZrO ₂ , HfO ₂ , TiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , P ₂ O ₅ , SiO ₂ , CaO, MgO, U, Th Gravimetric Analyses: <ul style="list-style-type: none"> ● Moisture content ● Loss of Ignition 	In-house method: LAB-ISO-TCH-001 In-house method: LAB-ISO-STP-014 LAB-ISO-STP-003
Rutile Final Product	X-ray Fluorence Spectroscopy: ZrO ₂ , TiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , P ₂ O ₅ , SiO ₂ , CaO, Cr ₂ O ₃ , MgO, MnO, U, Th, Sn, V ₂ O ₅ Gravimetric Analyses: <ul style="list-style-type: none"> ● Moisture content ● Loss of Ignition 	In-house method: LAB-ISO-TCH-002 In-house method: LAB-ISO-STP-014 LAB-ISO-STP-003
Ilmenite Final Product	X-ray Fluorence Spectroscopy: ZrO ₂ , TiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , P ₂ O ₅ , SiO ₂ , CaO, Cr ₂ O ₃ , MgO, U, Th, V ₂ O ₅ ,	In-house method: LAB-ISO-TCH-003

	Nb ₂ O ₅ , MnO	
	Gravimetric Analyses:	In-house method:
	<ul style="list-style-type: none"> ● Moisture content ● Loss on Ignition 	<p>LAB-ISO-STP-014</p> <p>LAB-ISO-STP-003</p>
	Wet chemical analyses:	In-house method:
	<ul style="list-style-type: none"> ● Fe²⁺ / Fe³⁺ 	LAB-ISO-STP-011
Chloride Slag Final Product	X-ray Fluorence Spectroscopy:	In-house method:
	ZrO ₂ , TiO ₂ , FeO, Al ₂ O ₃ , SiO ₂ , CaO, Cr ₂ O ₃ , MgO, U, Th, V ₂ O ₅ , Nb ₂ O ₅ , MnO	LAB-ISO-TCH-004
	Gravimetric Analyses:	In-house method:
	<ul style="list-style-type: none"> ● Moisture content ● Loss on Ignition 	<p>LAB-ISO-STP-014</p> <p>LAB-ISO-STP-003</p>
	Wet chemical analyses:	In-house method:
	<ul style="list-style-type: none"> ● Fe^{metallic} ● Ti³⁺ 	<p>LAB-ISO-STP-015</p> <p>LAB-ISO-STP-012</p>
Sulphate Slag Final Product	X-ray Fluorence Spectroscopy:	In-house method:
	ZrO ₂ , TiO ₂ , FeO, Al ₂ O ₃ , SiO ₂ , CaO, Cr ₂ O ₃ , MgO, U, Th, V ₂ O ₅ , Nb ₂ O ₅ , MnO	LAB-ISO-TCH-004
	Gravimetric Analyses:	In-house method:
	<ul style="list-style-type: none"> ● Loss on Ignition 	LAB-ISO-STP-003
	Wet chemical analyses:	In-house method:
	<ul style="list-style-type: none"> ● Fe^{metallic} ● Ti³⁺ 	<p>LAB-ISO-STP-015</p> <p>LAB-ISO-STP-012</p>

Original Date of Accreditation: 01 August 2005

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM


 Accreditation Manager