

Scope of Accreditation for Testing

Certificate No. 18T125/0750

Laboratory name Testing Laboratory, Foundation for Industrial Development : Thailand Textile Institute, Textile Testing Center

Address Soi Trimit, Rama IV Road, Phra Khanong, Khlong Toei, Bangkok

Accreditation No. TESTING 0110

Laboratory status Permanent Site Temporary Mobile

Field of Tested	Parameter	Test Method
Chemical and consumer products field 1. Textiles : fabrics and cloths	<ul style="list-style-type: none"> - Fiber Analysis - Binary fiber mixtures-quantitative analysis 	<ul style="list-style-type: none"> - TIS 121 : Part 15-2554 (2011) - AATCC test method 20 : 2013 - AATCC 20 A : 2017 - ISO 1833-1 : 2006 - ISO 1833-3 : 2006 - ISO 1833-4 : 2017 - ISO 1833-7 : 2017 - ISO 1833-8 : 2006 - ISO 1833-11 : 2017 - ISO 1833-12 : 2006 - ISO 1833-14 : 2006 - ISO 1833-16 : 2006 - ISO 1833-17 : 2006 - ISO 1833-18 : 2006 - TIS 121 : Part 26-2552 (2009) - TIS 2137-2559 (2016) clause 3.2 - TIS 2138-2559 (2016) clause 3.1 - TIS 2231-2550 (2007) clause 4.2 - TIS 2261-2549 (2006) clause 6.3 - TIS 2346-2550 (2007) clause 4.2 - TIS 2435-2552 (2009) clause 3.1.1.1 - TIS 2436-2552 (2009) clause 4.2 - TIS 2437-2552 (2009) clause 5.2 - TIS 2549-2557 (2014) clause 4.2

Issue No. 10 Valid from 9th November B.E. 2561 (2018) page 1/8

Ministry of Industry, Thai Industrial Standards Institute

Translation Note : In the event of doubt or misunderstanding, the original in Thai shall be the authoritative.

Scope of Accreditation for Testing

Certificate No. 18T125/0750

Accreditation No.

TESTING 0110

Laboratory status

Permanent Site Temporary Mobile

Field of Tested	Parameter	Test Method
Chemical and consumer products field 1. Textiles : fabrics and cloths (cont.)	<ul style="list-style-type: none"> - Color fastness to artificial light xenon arc fading lamp test - Color fastness tests <ul style="list-style-type: none"> • Washing 	<ul style="list-style-type: none"> - ISO 105-B02 : 2014 - AATCC test method 16 option 3 : 2004 - TIS 121 : Part 2-2552 (2009) - TIS 2137-2559 (2016) clause 3.2.5 - TIS 2138-2559 (2016) clause 5.2 - TIS 2261-2549 (2006) clause 6.4 - TIS 2436-2552 (2009) clause 4.5 - TIS 2437-2552 (2009) clause 5.5 - TIS 2549-2557 (2014) clause 5.4 - ISO 105-C10 : 2006 - AATCC test method 61 : 2010 (Exclude method 1B) - TIS 121 : Part 3-2552 (2009) - TIS 2137-2559 (2016) clause 3.2.5 - TIS 2138-2559 (2016) clause 5.2 - TIS 2231-2550 (2007) clause 6.4 - TIS 2261-2549 (2006) clause 6.4 - TIS 2346-2550 (2007) clause 4.3 - TIS 2549-2557 (2014) clause 5.4

Issue No. 10 Valid from 9th November B.E. 2561 (2018) page 2/8

Ministry of Industry, Thai Industrial Standards Institute

Translation Note : In the event of doubt or misunderstanding, the original in Thai shall be the authoritative.

Scope of Accreditation for Testing

Certificate No. 18T125/0750

Accreditation No.

TESTING 0110

Laboratory status

Permanent Site Temporary Mobile

Field of Tested	Parameter	Test Method
Chemical and consumer products field 1. Textiles : fabrics and cloths (cont.)	<ul style="list-style-type: none"> - Color fastness tests (cont.) <ul style="list-style-type: none"> • Rubbing/crocking • Perspiration • Chlorinated water (swimming – pool water) • Water • Dry cleaning 	<ul style="list-style-type: none"> - TIS 121 : Part 5-2552 (2009) - ISO 105-X12 : 2016 - AATCC test method 8 : 2007 - TIS 2137-2559 (2016) clause 3.2.5 - TIS 2138-2559 (2016) clause 5.2 - TIS 2231-2550 (2007) clause 6.4 - TIS 2346-2550 (2007) clause 4.3 - TIS 2435-2552 (2009) clause 3.1.1.3 - TIS 2436-2552 (2009) clause 4.5 - TIS 2437-2552 (2009) clause 5.5 - TIS 2549-2557 (2014) clause 5.4 - TIS 121 : Part 4-2552 (2009) - ISO 105-E04 : 2013 - TIS 2137-2559 (2016) clause 3.2.5 - TIS 2138-2559 (2016) clause 5.2 - TIS 2231-2550 (2007) clause 6.4 - TIS 2261-2549 (2006) clause 6.4 - TIS 2346-2550 (2007) clause 4.3 - TIS 2435-2552 (2009) clause 3.1.1.3 - TIS 2436-2552 (2009) clause 4.5 - TIS 2437-2552 (2009) clause 5.5 - TIS 2549-2557 (2014) clause 5.4 - ISO 105-E03 : 2010 - TIS 121 : Part 25-2552 (2009) - ISO 105-E01 : 2013 - ISO 105-D01 : 2010 - TIS 2436-2552 (2009) clause 4.5 - TIS 2437-2552 (2009) clause 5.5

Scope of Accreditation for Testing

Certificate No. 18T125/0750

Accreditation No.

TESTING 0110

Laboratory status

Permanent Site Temporary Mobile

Field of Tested	Parameter	Test Method
Chemical and consumer products field 1. Textiles : fabrics and cloths (cont.)	<ul style="list-style-type: none"> - Flammability of interior materials - Mass per unit area - Maximum force and elongation at maximum force using the strip method - Tear force of trouser - shaped test specimens (single tear method) - Number of threads per unit length (woven fabric) - Abrasion resistance - Free formaldehyde <p>Limit of Quantitation (LOQ) : 10.00 mg/kg</p>	<ul style="list-style-type: none"> - Federal Motor Vehicle Safety Standard 302 : 1998 - ISO 3801: 1977 method 5 - BS 2471: 1977 - TIS 121 : Part 12-2553 (2010) - TIS 2137-2559 (2016) clause 3.2.4 - TIS 2138-2559 (2016) clause 4.4 - TIS 2261-2549 (2006) clause 6.4 - TIS 2437-2552 (2009) clause 4.1.3 and 4.2.3 - TIS 2549-2557 (2014) clause 3.2 - ISO 13934-1 : 2013 - TIS 121 : Part 9-2552 (2009) - TIS 2549-2557 (2014) clause 5.4 - ISO 13937-2 : 2000 - BS EN ISO 13937-2 : 2000 - TIS 121 : Part 17-2553 (2010) - TIS 2137-2559 (2016) clause 3.2.5 - TIS 2138-2559 (2016) clause 5.2 - ISO 7211/2: 1984 method A, method C - TIS 121 : Part 13-2553 (2010) - TIS 2137-2559 (2016) clause 3.2.3 - TIS 2138-2559 (2016) clause 4.3 - TIS 2549-2557 (2014) clause 4.1 - ISO 12947-2 : 2016 - JIS L-1041 : 2011 <p>Acetylacetone method (method B)</p> 

Scope of Accreditation for Testing

Certificate No. 18T125/0750

Accreditation No.

TESTING 0110

Laboratory status

Permanent Site Temporary Mobile

Field of Tested	Parameter	Test Method
Chemical and consumer products field 1. Textiles : fabrics and cloths (cont.)	<ul style="list-style-type: none"> - Dimensional change after laundering - Formaldehyde content Limit of Quantitation (LOQ) : 15.00 mg/kg - pH value 4.0 - 9.2 	<ul style="list-style-type: none"> - ISO 5077: 2007 refer to <ul style="list-style-type: none"> • ISO 3759 : 2011 and • ISO 6330 : 2012 - AATCC test method 135 : 2010 - TIS 121 : Part 21-2552 (2009) - TIS 2261-2549 (2006) clause 6.4 - TIS 2436-2552 (2009) clause 4.4 - TIS 2437-2552 (2009) clause 5.4 - TIS 2549-2557 (2014) clause 5.4 - ISO 14184-1 : 2011 - TIS 121 : Part 33-2556 (2013) - TIS 2137-2559 (2016) clause 3.2.5 - TIS 2138-2559 (2016) clause 5.2 - TIS 2231-2550 (2007) clause 6.4 - TIS 2261-2549 (2006) clause 6.4 - TIS 2346-2550 (2007) clause 4.3 - TIS 2435-2552 (2009) clause 3.1.1.2 - TIS 2436-2552 (2009) clause 4.3 - TIS 2437-2552 (2009) clause 5.3 - TIS 2549-2557 (2007) clause 5.5 - BS EN 1413 : 1998 - ISO 3071 : 2005 - JIS L 1096 : 2010 - TIS 121 : Part 32-2556 (2013) - TIS 2231-2550 (2007) clause 6.4 - TIS 2261-2549 (2006) clause 6.4 - TIS 2346-2550 (2007) clause 4.3 - TIS 2435-2552 (2009) clause 3.1.1.2 - TIS 2436-2552 (2009) clause 4.3 - TIS 2437-2552 (2009) clause 5.3 - TIS 2549-2557 (2014) clause 5.5

Scope of Accreditation for Testing

Certificate No. 18T125/0750

Accreditation No.

TESTING 0110

Laboratory status

Permanent Site Temporary Mobile

Field of Tested	Parameter	Test Method
Chemical and consumer products field 1. Textiles : fabrics and cloths (cont.)	<ul style="list-style-type: none"> - Chromium (VI) Limit of Quantitation (LOQ) : 0.50 mg/kg - Azo dye Limit of Quantitation (LOQ) : 10.00 mg/kg - Antibacterial activity assessment of textile materials - Antibacterial finishes on textile materials 	<ul style="list-style-type: none"> - In house method : THTI-E04 based on ISO 105-E04 : 1994 / EPA 7196A : 1992 - TIS 2231-2550 (2007) clause 6.4 - TIS 2346-2550 (2007) clause 4.3 - TIS 2435-2552 (2009) clause 3.1.1.2 - TIS 2436-2552 (2009) clause 4.3 - TIS 2437-2552 (2009) clause 5.3 - TIS 2549-2557 (2014) clause 5.5 - BS EN 14362-1 : 2012 - ISO 24362-1 : 2014 - TIS 2137-2559 (2016) clause 3.2.5 - TIS 2138-2559 (2016) clause 5.2 - TIS 2231-2550 (2007) clause 6.4 - TIS 2261-2549 (2006) clause 6.4 - TIS 2346-2550 (2007) clause 4.3 - TIS 2435-2552 (2009) clause 3.1.1.2 - TIS 2436-2552 (2009) clause 4.3 - TIS 2437-2552 (2009) clause 5.3 - TIS 2549-2557 (2014) clause 5.5 - AATCC test method 147 : 2016 - AATCC test method 100 : 2012 - TIS 121 : Part 30-2554 (2011)

Scope of Accreditation for Testing

Certificate No. 18T125/0750

Accreditation No.

TESTING 0110

Laboratory status

Permanent Site Temporary Mobile

Field of Tested	Parameter	Test Method
Chemical and consumer products field 2. Synthetic dyestuff	<ul style="list-style-type: none"> - Color fastness tests <ul style="list-style-type: none"> • Washing • Rubbing/crocking - Heavy metal <ul style="list-style-type: none"> • Cadmium <p>Limit of Quantitation (LOQ) : 10.00 mg/kg</p> • Chromium <p>Limit of Quantitation (LOQ) : 10.00 mg/kg</p> • Cobalt <p>Limit of Quantitation (LOQ) : 10.00 mg/kg</p> • Copper <p>Limit of Quantitation (LOQ) : 10.00 mg/kg</p> • Lead <p>Limit of Quantitation (LOQ) : 10.00 mg/kg</p> • Mercury <p>Limit of Quantitation (LOQ) : 4.00 mg/kg</p> • Nickel <p>Limit of Quantitation (LOQ) : 10.00 mg/kg</p> 	<ul style="list-style-type: none"> - TIS 739-2555 (2012) clause 4.6 - TIS 740-2555 (2012) clause 3.5 - TIS 760-2555 (2012) clause 3.4 - TIS 2344-2555 (2012) clause 3.4 - TIS 2532-2554 (2011) clause 3.5 - TIS 760-2555 (2012) clause 3.6 - TIS 739-2555 (2012) clause 8.5 - TIS 740-2555 (2012) clause 7.4 - TIS 760-2555 (2012) clause 7.4 - TIS 2344-2555 (2012) clause 7.4 - TIS 2532-2554 (2011) clause 7.4

Issue No. 10 Valid from 9th November B.E. 2561 (2018) page 7/8

Ministry of Industry, Thai Industrial Standards Institute

Translation Note : In the event of doubt or misunderstanding, the original in Thai shall be the authoritative.

Scope of Accreditation for Testing

Certificate No. 18T125/0750

Accreditation No. TESTING 0110

Laboratory status Permanent Site Temporary Mobile

Field of Tested	Parameter	Test Method
Chemical and consumer products field 2. Synthetic dyestuff (cont.)	<ul style="list-style-type: none"> - Color fastness to artificial light xenon arc fading lamp test - Azo dye Limit of Quantitation (LOQ) : 100.00 mg/kg 	<ul style="list-style-type: none"> - TIS 739-2555 (2012) clause 4.5 - TIS 740-2555 (2012) clause 3.4 - TIS 760-2555 (2012) clause 3.3 - TIS 2344-2555 (2012) clause 3.3 - TIS 2532-2554 (2011) clause 3.4 - TIS 739-2555 (2012) clause 8.4 - TIS 740-2555 (2012) clause 7.3 - TIS 760-2555 (2012) clause 7.3 - TIS 2344-2555 (2012) clause 7.3 - TIS 2532-2554 (2011) clause 7.3 

Issue date 6th December B.E. 2561 (2018)

(Signature)

(Mr. Wanchai Phanomchai)

Deputy Secretary-General, Acting Secretary-General

Thai Industrial Standards Institute