

TRINIDAD AND TOBAGO STANDARD

COMPULSORY

LAUNDRY DETERGENTS– COMPULSORY REQUIREMENTS

CDTTCS 7:20XX
(Replaces TTS 466:2010)

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Draft standard for review

General statement

The Trinidad and Tobago Bureau of Standards (TTBS) is a body corporate established under the authority of the Standards Act No. 18 of 1997 (herein after referred to as the Standards Act).

In accordance with the Standards Act, the Bureau shall promote and encourage the development and maintenance of standards and further shall establish standards for the following: to improve goods produced or used in Trinidad and Tobago; to ensure industrial efficiency and development; to promote public and industrial welfare, health and safety; and to protect the environment.

The TTBS develops standards through consultation with relevant interest groups, and public comment is invited on all draft standards before they are declared as Trinidad and Tobago Standards in accordance with the provisions of the Standards Act.

The TTBS is the legal custodian of Trinidad and Tobago Standard Marks, which are issued in accordance with the Standards Act. When a Trinidad and Tobago Standard Mark appears on any product, or in connection with any service, process or practice, it provides assurance that such a product, service, process or practice conforms to a Trinidad and Tobago Standard.

The TTBS' Standards Information Centre maintains a reference library of standards, including local, regional and international standards and is the national node of the International Organization for Standardization Information Network (ISONET). The Centre serves as the WTO/TBT Enquiry Point which disseminates information on standards and technical regulations as it relates to the World Trade Organization, Technical Barriers to Trade Agreement. It also acts as the sales agent for the publications of foreign and international standards organizations.

NOTE In order to keep abreast of progress in the industries concerned, Trinidad and Tobago Standards are subject to periodic review. Suggestions for improvements are welcome.

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Draft standard for review

Foreword

These requirements were declared a Trinidad and Tobago Standard on _____ after the draft had been approved by the Trinidad and Tobago Bureau of Standards.

This standard replaces the Trinidad and Tobago Standard TTS 466:2010, *Detergent- Synthetic laundry detergent powder –Specification (1st Revision)*. This standard differs from the previous version with respect to the following:

- a) an expanded scope to include detergents in powder, liquids, bars and capsules or pods; and
- b) a condensed number of parameters that are aligned to the TTBS' mandate.

This standard was revised in alignment with Good Regulatory Practices and to keep abreast with current practices in the industry.

The Trinidad and Tobago Bureau of Standards has recommended that this standard be accorded compulsory status. This standard will become effective as a compulsory standard on a date to be notified by the Minister responsible for trade and industry in a Notice to be published in the Trinidad and Tobago Gazette, as required by the Standards Act to protect public health, welfare and safety, for the protection of the environment and to ensure acceptable quality in products.

This standard is intended for use by:

- a) Manufacturers, importers and distributors of laundry detergent to assist in manufacturing or procuring products which satisfy minimum requirements and demonstrating compliance to this compulsory standard; and
- b) Regulatory agencies as a basis for assessing imported or locally manufactured products within an established regulatory framework.

1 Scope

This standard establishes compulsory requirements for laundry detergents. It specifies the chemical requirements for key parameters and also includes requirements for labelling of the packaging used for laundry detergents.

This national standard is applicable to laundry detergent that is intended primarily for washing textile products using washing machines designed for household applications or by manual means.

The requirements apply to laundry detergents in the following forms :

- a) powder;
- b) liquid;
- c) bar; and
- d) capsule or pod.

This standard does not apply to detergents for washing and cleaning outside the domestic sphere, carried out by specialised personnel using specific products.

2 Normative references

The following referenced documents are indispensable to the application of this document. For the undated references, the latest edition of the referenced document (including any amendments) applies.

ASTM International

ASTM D820, *Standard Test Methods for Chemical Analysis of Soaps Containing Synthetic Detergents*

ASTM D1172, *Standard Guide for pH of Aqueous Solutions of Soaps and Detergents*

ASTM D 6173, *Standard Test Method for Determination of Various Anionic Surfactant Actives by Potentiometric Titration*

British Standards Institution

BS 3762- 3.7, *Analysis of formulated detergents – Part 3: Quantitative test methods – Section 3.7: Method for determination of total non-ionic matter content*

International Organization for Standardization

ISO 4316, *Surface active agents — Determination of pH of aqueous solutions — Potentiometric method*

ISO 2871-1, *Surface active agents — Detergents — Determination of cationic-active matter content — Part 1: High-molecular-mass cationic-active matter*

ISO 2871-2, *Surface active agents — Detergents — Determination of cationic-active matter content — Part 2: Cationic-active matter of low molecular mass (between 200 and 500)*

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ISO 2271, *Surface active agents — Detergents — Determination of anionic-active matter by manual or mechanical direct two-phase titration procedure*

ISO 4313, *Washing powders – Determination of total phosphorous(V) oxide content - Quinoline phosphomolybdate gravimetric method*

ISO 7875-2, *Water quality – Determination of surfactants – Part 2 : Determination of non-ionic surfactants using Dragendorff Reagent*

ISO 10708, *Water quality — Evaluation in an aqueous medium of the ultimate aerobic biodegradability of organic compounds — Determination of biochemical oxygen demand in a two-phase closed bottle test*

British Standards Institution

BS 3762-3.7, *Analysis of formulated detergents – Part 3. Quantitative test methods – Section 3.7 Method for determination of total non-ionic matter content*

Organization for Economic Co-operation and Development

OECD 301D, *Guideline for testing of chemicals – Closed bottle test*

3 Terms and definitions

For the purposes of this document, the following terms and definitions shall apply.

3.1

bulk package

a package in which one or more similar articles of prepackaged goods are placed

3.2

detergent

product specifically formulated for cleaning through the process of detergency

3.3

detergency

the process by which soil is dislodged from the substrate and brought into a state of solution or dispersion

3.4

detergent capsules/pods

products containing laundry soap, softener and other detergents enclosed in a soluble plastic membrane which dissolves when in contact with water

3.5

surface active agent

surfactant

chemical compound when dissolved in a liquid, in particular in water, lowers the surface tension or interfacial tension, by preferred adsorption at the liquid/vapour surface, or other interfaces

3.6

ultimate biodegradation

level of biodegradation achieved when the surfactant is totally used by micro-organisms in the presence of oxygen, resulting in its breakdown to carbon dioxide, water and mineral salts

4 Compulsory requirements

4.1 Chemical composition

4.1.1 Laundry detergents shall conform to the requirements specified in Table 1 when tested in accordance with the relevant test methods.

Table 1 — Chemical requirements for laundry detergents

Parameter	Form of laundry detergent							
	Powder		Liquid		Bar		Capsule/pod	
	Test method	Limit						
Moisture and volatile matter content at 105 °C maximum wt %	ASTM D820	15	-	-	-	-	-	-
pH maximum	ASTM D1172 or ISO 4316	11	ASTM D1172 or ISO 4316	11	ASTM D1172 or ISO 4316	11	ASTM D1172 or ISO 4316	12.5
Water insoluble matter maximum wt %	ASTM D820	5	-	-	-	-	-	-
Surface active agent minimum wt %	ISO 2871-1 ISO 2872-2 ISO 2271 BS 3762-3.7 ASTM D6173 (for pure anionic surfactants)	10	ISO 2871-1 ISO 2872-2 ISO 2271 BS 3762-3.7 ASTM D6173 (for pure anionic surfactants)	15	ISO 2871-1 ISO 2872-2 ISO 2271 BS 3762-3.7 ASTM D6173 (for pure anionic surfactants)	20	ISO 2871-1 ISO 2872-2 ISO 2271 BS 3762-3.7 ASTM D6173 (for pure anionic surfactants)	20

	Form of laundry detergent							
	Powder		Liquid		Bar		Capsule/pod	
	Test method	Limit						
Phosphates as STPP and tetrasodium pyrophosphate maximum wt %	ISO 4313	1						
Ultimate biodegradation of surfactant minimum %	OECD 301D or ISO 10708	60						

4.2 Labelling

4.2.1 Labelling of laundry detergents in powder and liquid form

4.2.1.1 Retail packages of powder and liquid laundry detergents shall be conspicuously and legibly labelled in the English Language with the following information:

- a) the common or usual name of the product,
- b) any trade name or brand name;
- c) the name and identifiable address, the principal place of business or registered office of the manufacturer, agent, distributor, seller, re-filler, packer, importer or organization responsible for the product together with a relevant electronic or telephone contact. This information shall be preceded by the words “manufactured by”, “packed by”, “distributed by”, or “imported by”, as applicable.
- d) country of origin which shall be preceded by any of following phrases :
 - 1) “made in”;
 - 2) “product of”;
 - 3) “packaged in”; or
 - 4) “manufactured in”.
- e) a correct statement of the net contents of the package, subject to such tolerance as may be allowed, in SI units and any other units permitted under the Metrology Act 18 of 2004;

- f) all ingredients or contents shall be listed in decreasing order of pre-dominance by weight or volume. 'Active Ingredients' shall be stated first, in decreasing order of weight, or volume, or percentage, followed by the 'Inert Ingredients', in decreasing order of weight or percentages
- g) where any risk to the safety or health of a consumer or user, or where any significant deterioration of the quality, performance life, durability, or other property of the laundry detergent may result, any appropriate hazard symbol and instructions for use, shall be provided on the label on the package.
- h) the batch number or lot number; if coded, this information shall be clear and unambiguous to the TTBS;
- i) date of manufacture of the product shall be stated in a format which is unambiguous and acceptable to the TTBS;

EXAMPLE The following are acceptable date markings:

- 1) JAN 08
 - 2) JAN 2008
 - 3) 13 JAN 2008
 - 4) 01 2008
- j) the date of minimum durability shall be declared by the words "best before" or words expressing similar intent including "expiry" or "use by", "BB" or "EXP". The words used to express date of minimum durability shall be accompanied by:
 - 1) either the date itself; or
 - 2) a reference to where the date is given.
 - k) information regarding any specific dangers and precautions which might be related to the detergent and its application and first aid instructions where necessary; and

EXAMPLE Detergent solution can be a skin irritant. Avoid prolonged contact. Rinse garment and hands thoroughly.

- l) storage conditions for laundry detergents.

4.2.1.2 Bulk packages of powder and liquid laundry detergents shall be conspicuously and legibly labelled in the English Language with the following information:

- a) the common or usual name of the laundry detergent,
- b) any trade name or brand name;
- c) the name and identifiable address, the principal place of business or registered office of the manufacturer, agent, distributor, seller, re-filler, packer, importer or organization responsible for the laundry detergent together with a relevant electronic or telephone contact. This information shall be preceded by the words "manufactured by", "packed by", "distributed by", or "imported by", as applicable.

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- d) country of origin which shall be preceded by any of following phrases :
 - 1) "made in";
 - 2) "product of";
 - 3) "packaged in"; or
 - 4) "manufactured in".
- e) a correct statement of the number of retail packages contained within the bulk package;
- f) the batch number or lot number ; if coded, this information shall be clear and unambiguous to the TTBS;
- g) date of manufacture of the laundry detergent shall be stated in a format which is unambiguous and acceptable to the TTBS;
- h) the date of minimum durability shall be declared by the words "best before" or words expressing similar intent including "expiry" or "use by", "BB" or "EXP". The words used to express date of minimum durability shall be accompanied by:
 - 1) either the date itself; or
 - 2) a reference to where the date is given.
- i) storage conditions for laundry detergents.

4.2.2 Labelling of detergents in bar and capsule/pod form

Retail and bulk packages of bar and capsule/pod detergents shall be conspicuously and legibly labelled in the English Language with the following information:

- a) any trade name or brand name ;
- b) country of origin which shall be preceded by any of following phrases:
 - 1) "made in";
 - 2) "product of";
 - 3) "packaged in"; or
 - 4) "manufactured in".
- c) the date of minimum durability shall be declared by the words "best before" or words expressing similar intent including "expiry" or "use by", "BB" or "EXP". The words used to express date of minimum durability shall be accompanied by:
 - 1) either the date itself; or
 - 2) a reference to where the date is given.

5 Mechanisms to demonstrate compliance

5.1 The TTBS shall verify compliance to this standard and all laundry detergents shall be subject to a mandatory conformity assessment programme administered by TTBS, through inspection or certification or a combination of both.

NOTE Inspection and certification programmes include testing and market surveillance related to the product and may include assessments of the production process or quality management system.

5.2 TTBS may consider and accept information from other sources, such as third party testing, product certification and/or quality management system certification from recognized or accredited bodies, subject to the terms and conditions of TTBS and as outlined in the Standards Act No.18 of 1997, to provide objective evidence of compliance to the standard.

5.3 The information in clause 5.2 may include certificates, reports and other relevant information. Provision of this information does not exempt TTBS from conducting any further assessment activities deemed necessary to demonstrate compliance with the standard.

6 Measures related to non-compliance

6.1 Where imported or locally manufactured laundry detergents are found to be in breach of any of the requirements outlined in Clause 4, the Trinidad and Tobago Bureau of Standards shall initiate any of the following actions:

- a) direct the importer, distributor or manufacturer to remove non-conforming products from use throughout Trinidad and Tobago within a specified timeframe;
- a) seize and detain non-conforming products within the legal framework specified under the Standards Act, Chapter 82:03 including any amendments and revisions;
- b) prohibit the sale and distribution of non-compliant products in Trinidad and Tobago;
- c) permit modifications as it pertains to labelling necessary for compliance, where possible; or
- d) direct the manufacturer, importer or distributor to initiate a product recall.

6.2 Any breaches to this standard are subject to fines and penalties as outlined in the Standards Act, Chapter 82:03.