



Specification for laundry detergent powder for household use in manual washing



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The Technical Committee for Chemistry, appointed by the Chemical Standards Committee and responsible for the preparation of this standard, consists representatives from the following organisations:

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Environmental Management Association of Singapore
Health Sciences Authority
Klenco (Singapore) Pte Ltd
Lam Soon Singapore Pte Ltd
National Environment Agency
NTUC FairPrice Co-operative Ltd
Procter & Gamble
Setsco Services Pte Ltd
TUV SUD PSB Pte Ltd

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Foreword

This Singapore Standard was prepared by the Technical Committee for Chemistry under the direction of the Chemical Standards Committee.

Although laundry detergent powder can be of the anionic, cationic or non-ionic type, the specification only covers the anionic type which is used widely.

Besides specifying the detergent to be of the anionic type, the standard also prescribes that the anionic surface active agents (surfactants) shall be biodegradable.

In preparing this standard, reference was made to the following overseas publications:

1.	2012 Annual Books of ASTM	Volume 15.04 – Soaps and other detergents
2.	Canadian Government Specifications Board Standard CAN/CGSB-2.115-95 (Aug 1995)	Built powder laundry detergent
3.	Indian Standard 4955 : 2001	Household laundry detergent powders (fourth revision)
4.	South African Bureau of Standards SANS 650 : 2008	Laundry detergent (for use in non-automatic domestic washing machines)
5.	ISO 607: 1980	Analysis of formulated detergents. Methods of sample division
6.	ISO 2271:1989	Surface active agents – Detergents – Determination of anionic-active matter by manual or mechanical direct two-phase titration procedure
7.	ISO 4313 – 1976 (E)	Washing powders – Determination of total phosphorus (V) oxide content – Quinoline phosphomolybdate gravimetric method
8.	EC Regulation No 648/2004 of the European Parliament and of the Council of 31 March 2004	Detergents

Acknowledgement is made for the use of information from the above references.

Annexes B and C of this standard were extracted with permission from the *Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents* – Annex II and Annex III, respectively.

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1 Scope

This standard covers the requirements and methods of sampling and testing for synthetic powder detergents for household washing of laundry by hand.

2 Normative references

The following referenced documents are indispensable for the application of this standard. The latest editions of the referenced documents (including any amendments) apply.

BS 1647-1 pH measurement. Specification for pH scale

BS 1752 Specification for laboratory sintered or fritted filters including porosity grading