Singapore Standard SS 231:2013

Specification for laundry detergent powder for household use in manual washing

AMENDMENT NO. 1

April 2022

1. Page 6, Foreword

Replace the second paragraph of the Foreword with the following sentence:

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

2. Page 7, 3.2 Detail requirements

Replace Table 1 and the note with the following:

Table 1 – Requirements of laundry detergent powder for household use in manual washing

	Characteristic	Requirement	Annex (recommended methods of test)
1.	Total surface active agents, % (m/m), minimum	10.0	A
2.	Biodegradability of anionic surface active agents, % (m/m), minimum (See NOTE 1)	90.0 60.0	B C
3.	Total phosphate (as P ₂ O ₅), % (m/m), maximum, or,	1.1	
	Phosphorus (P), % (m/m), maximum	0.5	Not applicable (See NOTE 2)
4.	pH at 25 °C (for 1 % aqueous solution, m/v), maximum	11	E
5.	Insoluble matter, % (m/m) maximum	1.0	F

NOTE 1 – The user can fulfil either the primary test method requirements of 90 % or the ultimate test method requirements of 60 %.

NOTE 2 – Commonly used methods include the utilisation of Inductively coupled plasma mass spectrometry (ICP-MS), Inductively Coupled Plasma Optical Emission Spectrometry (ICPOES), or whichever appropriate to conduct the test.

3. Page 9, Annex A

Replace "normative" with "informative".

4. Page 18, Annex D

Replace "normative" with "informative".

5. Page 21, Annex E

Replace "normative" with "informative".

6. Page 22, Annex F

Replace "normative" with "informative".