
Changes to legislation: There are outstanding changes not yet made to Regulation (EC) No 648/2004 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

[^{F1} ANNEX III

ULTIMATE BIODEGRADABILITY (MINERALISATION) TEST METHODS FOR SURFACTANTS IN DETERGENTS

Textual Amendments

- F1** Substituted by [Commission Regulation \(EC\) No 907/2006 of 20 June 2006 amending Regulation \(EC\) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII thereto \(Text with EEA relevance\)](#).

A. The reference method for laboratory testing of surfactant ultimate biodegradability in this Regulation is based on the EN ISO standard 14593: 1999 (CO₂ headspace test).

Surfactants in detergents shall be considered as biodegradable if the level of biodegradability (mineralisation) measured according to one of the following tests⁽¹⁾ is at least 60 % within 28 days:

1. EN ISO Standard 14593: 1999 — Water quality — Evaluation of ultimate aerobic biodegradability of organic compounds in aqueous medium — Method by analysis of inorganic carbon in sealed vessels (CO₂ headspace test). Pre-adaptation is not to be used. The 10-day window principle is not applied (reference method).
 2. Directive 67/548/EEC method, Annex V.C.4-C (carbon dioxide (CO₂) Evolution modified Sturm test): pre-adaptation is not to be used. The 10-day window principle is not applied.
 3. Directive 67/548/EEC method, Annex V.C.4-E (closed Bottle): pre-adaptation is not to be used. The 10-day window principle is not applied.
 4. Directive 67/548/EEC method, Annex V.C.4-D (manometric respirometry): pre-adaptation is not to be used. The 10-day window principle is not applied.
 5. Directive 67/548/EEC method, Annex V.C.4-F (MITI: Ministry of International Trade and Industry, Japan): pre-adaptation is not to be used. The 10-day window principle is not applied.
 6. ISO 10708:1997 — 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. Pre-adaptation is not to be used. The 10-day window principle is not applied.
- B. Depending on the physical characteristics of the surfactant, one of the methods listed below may be used if appropriately justified⁽²⁾. It should be noted that the pass criterion of at least 70 % of these methods is to be considered as equivalent to the pass criterion of at least 60 % referred to in methods listed in point A. The adequacy of the choice of the methods listed below shall be decided on a case-by-case confirmation, in accordance with Article 5 of this Regulation.
1. Directive 67/548/EEC method, Annex V.C.4-A (dissolved organic carbon DOC die-away): pre-adaptation is not to be used. The 10-day window principle is not applied. The pass criteria for biodegradability measured according to the test shall be at least 70 % within 28 days.
 2. Directive 67/548/EEC method, Annex V.C.4-B (modified OECD screening-DOC die-away): pre-adaptation is not to be used. The 10-day window principle is not applied.

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The pass criteria for biodegradability measured according to the test shall be at least 70 % within 28 days.

NB: Those of the abovementioned methods that are taken from Council Directive 67/548/EEC can also be found in the publication ‘Classification, Packaging and Labelling of Dangerous Substances in the European Union’, Part 2: ‘Testing Methods’. European Commission 1997, ISBN 92-828-0076-8.]

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- (1) [^{F1}These tests are identified as the most suitable for surfactants.]
- (2) [^{F1}The DOC methods could give results on the removal and not on the ultimate biodegradation. The manometric respirometry and the MITI and two-phase BOD methods would not be appropriate in some cases because the high initial test concentration could be inhibitory.]

Textual Amendments

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Changes and effects yet to be applied to the whole legislation item and associated provisions

- Signature words omitted by [S.I. 2019/672 reg. 22](#)
- Annex 1 para. 1 words substituted by [S.I. 2019/672 reg. 23\(2\)\(a\)](#)
- Annex 1 para. 1 words substituted by [S.I. 2019/672 reg. 23\(2\)\(b\)](#)
- Annex 1 para. 1 words substituted by [S.I. 2019/672 reg. 23\(2\)\(c\)](#)
- Annex 1 para. 2 words substituted by [S.I. 2019/672 reg. 23\(3\)\(a\)](#)
- Annex 1 para. 2 words substituted by [S.I. 2019/672 reg. 23\(3\)\(b\)](#)
- Annex 2 s. A words substituted by [S.I. 2019/672 reg. 24\(2\)](#)
- Annex 2 s. B words substituted by [S.I. 2019/672 reg. 24\(2\)](#)
- Annex 2 s. D words substituted by [S.I. 2019/672 reg. 24\(2\)](#)
- Annex 2 s. C words substituted by [S.I. 2019/672 reg. 24\(3\)](#)
- Art. 2(9) word omitted by [S.I. 2019/672 reg. 6\(2\)\(a\)](#)
- Art. 2(9) words substituted by [S.I. 2019/672 reg. 6\(2\)\(b\)](#)
- Art. 2(9) words substituted by [S.I. 2019/672, reg. 6\(2\)](#) (as substituted) by [S.I. 2020/1617 reg. 2\(4\)\(a\)](#)
- Art. 2(9a) words substituted by [S.I. 2019/672 reg. 6\(3\)](#)
- Art. 2(9A) words substituted in earlier amending provision [S.I. 2019/672, reg. 6\(3\)](#) by [S.I. 2020/1617 reg. 2\(4\)\(b\)](#)
- Art. 2(10) words inserted by [S.I. 2019/672 reg. 6\(4\)](#)
- Art. 2(10) words inserted by [S.I. 2019/672, reg. 6\(4\)](#) (as substituted) by [S.I. 2020/1617 reg. 2\(4\)\(c\)](#)
- Art. 2(13)-(15) inserted by [S.I. 2019/672 reg. 6\(5\)](#)
- Art. 2(16) inserted in earlier amending provision [S.I. 2019/672, reg. 6\(5\)](#) by [S.I. 2020/1617 reg. 2\(4\)\(d\)](#)
- Annex 3 Pt. B words omitted by [S.I. 2019/672 reg. 25\(3\)\(c\)](#)
- Annex 3 Pt. A para. 2 words substituted by [S.I. 2019/672 reg. 25\(2\)\(a\)](#)
- Annex 3 Pt. A para. 3 words substituted by [S.I. 2019/672 reg. 25\(2\)\(b\)](#)
- Annex 3 Pt. A para. 4 words substituted by [S.I. 2019/672 reg. 25\(2\)\(c\)](#)
- Annex 3 Pt. A para. 5 words substituted by [S.I. 2019/672 reg. 25\(2\)\(d\)](#)
- Annex 3 Pt. B para. 1 words substituted by [S.I. 2019/672 reg. 25\(3\)\(a\)](#)
- Annex 3 Pt. B para. 2 words substituted by [S.I. 2019/672 reg. 25\(3\)\(b\)](#)
- Art. 3(1)(a) substituted by [S.I. 2019/672 reg. 7\(2\)\(b\)](#)
- Art. 3(1)(a) words substituted in earlier amending provision [S.I. 2019/672, reg. 7\(2\)\(b\)](#) by [S.I. 2020/1617 reg. 2\(5\)](#)
- Art. 3(1)(b) words substituted by [S.I. 2019/672 reg. 7\(2\)\(c\)](#)
- Art. 3(1)(c) words substituted by [S.I. 2019/672 reg. 7\(2\)\(d\)](#)
- Art. 3A inserted by [S.I. 2019/672, reg. 7A](#) (as inserted) by [S.I. 2020/1617 reg. 2\(6\)](#)
- Annex 4 point 3 words inserted by [S.I. 2019/672 reg. 26\(8\)\(b\)](#)
- Annex 4 words omitted by [S.I. 2019/672 reg. 26\(6\)](#)
- Annex 4 point 1 heading words omitted by [S.I. 2019/672 reg. 26\(7\)](#)
- Annex 4 point 3 words omitted by [S.I. 2019/672 reg. 26\(8\)\(a\)](#)
- Annex 4 words omitted by [S.I. 2019/672 reg. 26\(13\)](#)
- Annex 4 words substituted by [S.I. 2019/672 reg. 26\(2\)](#)
- Annex 4 words substituted by [S.I. 2019/672 reg. 26\(3\)](#)
- Annex 4 words substituted by [S.I. 2019/672 reg. 26\(4\)](#)
- Annex 4 words substituted by [S.I. 2019/672 reg. 26\(5\)](#)
- Annex 4 point 4.1.2 words substituted by [S.I. 2019/672 reg. 26\(9\)\(a\)](#)
- Annex 4 point 4.1.2 words substituted by [S.I. 2019/672 reg. 26\(9\)\(b\)](#)
- Annex 4 point 4.1.3 words substituted by [S.I. 2019/672 reg. 26\(10\)](#)
- Annex 4 point 4.2.2 words substituted by [S.I. 2019/672 reg. 26\(11\)\(a\)](#)

- Annex 4 point 4.2.2 words substituted by [S.I. 2019/672 reg. 26\(11\)\(b\)](#)
- Annex 4 point 4.2.2 words substituted by [S.I. 2019/672 reg. 26\(11\)\(c\)](#)
- Annex 4 point 4.2.2 words substituted by [S.I. 2019/672 reg. 26\(11\)\(d\)](#)
- Annex 4 point 4.2.3 words substituted by [S.I. 2019/672 reg. 26\(12\)\(a\)](#)
- Annex 4 point 4.2.3 words substituted by [S.I. 2019/672 reg. 26\(12\)\(b\)](#)
- Annex 5 words omitted by [S.I. 2019/672 reg. 27](#)
- Annex 7 Pt. B words inserted by [S.I. 2019/672 reg. 28\(3\)\(b\)](#)
- Annex 7 Pt. A words substituted by [S.I. 2019/672 reg. 28\(2\)\(a\)\(i\)](#)
- Annex 7 Pt. A words substituted by [S.I. 2019/672 reg. 28\(2\)\(a\)\(ii\)](#)
- Annex 7 Pt. A words substituted by [S.I. 2019/672 reg. 28\(2\)\(b\)\(i\)](#)
- Annex 7 Pt. A words substituted by [S.I. 2019/672 reg. 28\(2\)\(b\)\(ii\)](#)
- Annex 7 Pt. B words substituted by [S.I. 2019/672 reg. 28\(3\)\(a\)](#)
- Annex 7 Pt. C words substituted by [S.I. 2019/672 reg. 28\(4\)](#)
- Annex 7 Pt. D words substituted by [S.I. 2019/672 reg. 28\(5\)](#)
- Annex 8 words substituted by [S.I. 2019/672 reg. 29](#)
- Art. 10(3)(4) inserted by [S.I. 2019/672 reg. 13\(4\)](#)
- Art. 15(3)-(8) inserted by [S.I. 2019/671 reg. 3\(4\)](#)
- Art. 15(3) words omitted in earlier amending provision [S.I. 2019/671, reg. 3\(4\)](#) by [S.I. 2020/1617 reg. 3\(2\)\(b\)\(i\)](#)
- Art. 15(6)(7) omitted in earlier amending provision [S.I. 2019/671, reg. 3\(4\)](#) by [S.I. 2020/1617 reg. 3\(2\)\(b\)\(ii\)](#)
- Art. 18A inserted by [S.I. 2019/672 reg. 21](#)
- Art. 18A(1) words omitted in earlier amending provision [S.I. 2019/672, reg. 21](#) by [S.I. 2020/1617 reg. 2\(9\)\(a\)](#)
- Art. 18A(3) substituted in earlier amending provision [S.I. 2019/672, reg. 21](#) by [S.I. 2020/1617 reg. 2\(9\)\(b\)](#)