

BBIA Consultation Response:

UK Fertilisers Regulatory Reform (UK FPR)

Submitted to: [Defra Fertilisers Regulatory Reform Consultation](#)

June 2026

Contents

Executive Summary	3
About the BBIA	3
Consultation Response.....	5
Section 1 – Overall Approach to UK Fertilising Product Regulations (UK FPR)	5
Section 2 – Conformity Assessment Framework	6
Section 3 – Technical Requirements and Product Categories	7
Section 4 – Biodegradable Polymers, Coating Agents and Water Retention Polymers.....	7
Section 5 – Biodegradable Mulch Films and Agricultural Plastics	9
Section 6 – Compost, Digestate and Circular Economy Materials.....	9
Section 7 – Biostimulants.....	10
Section 8 – Enforcement and Transitional Arrangements	10
Section 9 – Evidence and Further Technical Engagement	10
Recommendations	11
Conclusion.....	11
Key Supporting References	12

Executive Summary

BBIA supports Defra's proposal to replace the current fertiliser regulatory regime with a modernised UK Fertilising Product Regulations (UK FPR) framework that is more flexible, innovation-friendly, and aligned with sustainable agriculture objectives. The existing framework is considered outdated and insufficient to accommodate emerging technologies such as biostimulants, biodegradable polymers, circular-economy-derived materials, and novel agricultural inputs.

BBIA strongly advocates close alignment with the EU Fertilising Products Regulation (EU) 2019/1009 (as amended), arguing that alignment would reduce trade barriers, avoid duplication of conformity assessment, improve regulatory certainty, support economies of scale for innovation, and maintain scientific consistency. BBIA considers alignment strategically important for maintaining UK competitiveness, accelerating innovation uptake, and supporting environmental performance across the bioeconomy sector.

The association supports Defra's proposed conformity-assessment-based regulatory model, provided that assessment processes remain proportionate, transparent, and accessible for SMEs and innovative businesses. BBIA calls for clear guidance on how conformity assessment will apply to Product Function Categories (PFCs) and Component Material Categories (CMCs), particularly regarding biodegradable polymers and water-soluble polymer additives.

BBIA broadly supports adopting technical requirements and product categories that mirror the EU framework, noting that divergence without strong scientific justification would create unnecessary complexity, higher compliance costs, and barriers to trade and innovation.

A major focus of the response is the inclusion of biodegradable polymers, coating agents, water retention polymers, and biodegradable technical additives within the UK FPR framework. BBIA recommends alignment with the equivalent EU FPR requirements relating to biodegradation in relevant environmental compartments, ecotoxicity, and restrictions on persistent microplastics.

BBIA also supports introducing exemptions for biodegradable and water-soluble polymers under CMC 1 and CMC 9, consistent with the exemptions provided under Delegated Regulation (EU) 2024/2770 for certain naturally occurring polymers.

However, clarification is needed regarding how the UK intends to regulate polymers used as coating agents, water retention agents, wetting agents, and mulch films if CMC 9 is not incorporated into the UK FPR framework. Under the amended EU FPR (see footnote 1), such polymers are generally required to meet specified biodegradability criteria unless they qualify for exemption as naturally occurring polymers under Delegated Regulation (EU) 2024/2770.

BBIA further recommends establishing a future regulatory pathway for biodegradable mulch films (in CMC 9) with biodegradability criteria consistent with EU provisions. We also recommend explicitly excluding oxo-degradable plastics for all plastics applications where a possibility of environmental dispersion exists, due to their contribution to microplastic pollution. We therefore specify that, wherever a possible dispersion of plastics (intentional and non-intentional) exists, to use only biodegradable plastics in line with biodegradability criteria defined by EU Fertilizers legislation (within the scope of fertiliser regulations).

The response highlights the environmental benefits of biodegradable agricultural plastics, including reduced soil contamination and lower disposal burdens.

The submission also supports strong regulatory pathways for composts, digestates, recycled nutrient products, other types of bulky organic fertilisers, and other circular-economy-derived materials that can improve nutrient circularity, soil health, and resilience while reducing dependence on imported mineral fertilisers.

BBIA welcomes the inclusion of biostimulants within UK FPR and emphasises the need for clear, proportionate market access routes aligned with EU definitions and standards.

On implementation, BBIA calls for proportionate enforcement, early publication of technical guidance, recognition of equivalent EU evidence where appropriate, continued stakeholder engagement, and practical transition arrangements that minimise burdens on SMEs and reduce market disruption.

Overall, BBIA supports the creation of a scientifically robust, internationally aligned regulatory framework that promotes innovation, sustainable agriculture, environmental protection, improved soil health, nutrient circularity, and reduced microplastic contamination, while maintaining regulatory efficiency and supporting UK competitiveness.

About the BBIA

The Bio-based and Biodegradable Industries Association (BBIA) is the UK's leading trade association representing organisations involved in the development, manufacture and promotion of bio-based, biodegradable and compostable materials and products. Founded in 2015, the BBIA works to accelerate the growth of the industrial bioeconomy through advocacy, collaboration and education, helping to reduce reliance on fossil-based resources and support the transition to a more sustainable circular economy. Its members include companies, researchers, innovators and industry stakeholders working across sectors such as packaging, chemicals, agriculture, consumer goods and advanced materials.

The association plays an active role in shaping UK policy and industry standards by engaging with government, regulators and international standards bodies on issues relating to sustainability, waste, packaging and bio-based innovation. In addition to representing member interests, the BBIA publishes industry research, white papers and policy reports focused on areas such as engineering biology, sustainable packaging and industrial biotechnology. Through its growing network and partnerships across the UK and Europe, the organisation aims to position the UK as a global leader in bio-based and biodegradable technologies and solutions.

Consultation Response

Section 1 – Overall Approach to UK Fertilising Product Regulations (UK FPR)

BBIA supports the replacement of the existing fertiliser regulatory regime with a modernised UK Fertilising Product Regulations (UK FPR) framework.

The current legislative structure is outdated and insufficiently flexible to accommodate innovative fertilising products, biodegradable technologies, biostimulants, circular-bioeconomy-derived materials, and novel agricultural inputs. A modern conformity-assessment-based framework would provide greater flexibility, support innovation, and improve environmental outcomes.

We particularly support Defra's stated objective of encouraging products that are less polluting and less resource intensive to manufacture.

The UK has a significant opportunity to establish a future-facing regulatory system that supports sustainable agriculture, drives profitability for UK farmers, encourages innovation and investment, reduces environmental pollution, improves nutrient circularity, supports soil health and reduces persistent microplastic contamination.

We strongly encourage close alignment with the EU Fertilising Products Regulation (EU) 2019/1009 in order to minimise trade barriers, reduce duplication of conformity assessment, and support regulatory certainty for businesses operating across UK and EU markets.

Strategic importance of aligning with the EU FPR

We strongly encourage close alignment with the EU Fertilising Products Regulation (EU) 2019/1009. This alignment is not only beneficial but strategically important for the UK market for several reasons:

- **Regulatory predictability and stability:** The EU FPR is already an established, science-based framework with defined product categories, conformity routes, and technical criteria. Aligning with it reduces regulatory uncertainty and transition risk.
- **Reduced compliance duplication:** Divergence would require dual testing, dual certification, and duplicated conformity assessment for companies operating across UK and EU markets. UK fertiliser and agricultural-input manufacturers exporting into the EU will strongly benefit from operating within a single interoperable framework rather than navigating separate UK and EU systems.
- **Trade friction reduction:** Alignment minimises non-tariff barriers, supporting smoother trade for UK manufacturers exporting to the EU and for EU suppliers entering the UK market.
- **Economies of scale for innovation:** A shared regulatory baseline enables companies to scale innovation across multiple markets more efficiently, improving investment attractiveness and accelerating commercialisation.
- **Faster innovation cycles:** The EU system already incorporates delegated regulations and technical updates based on scientific review. Aligning allows the UK to benefit from these updates without repeatedly recreating technical assessments.
- **Scientific robustness and regulatory efficiency:** The EU framework is grounded in extensive multi-stakeholder scientific evaluation involving the European Commission, JRC, academia, regulators, and industry. Replicating this independently in the UK risks duplication of effort

without delivering materially improved outcomes. The EU approach therefore provides a tested, evolving, and evidence-based regulatory ecosystem that the UK can benefit from while still retaining regulatory autonomy where appropriate.

- **Alignment with emerging UK environmental priorities:** The UK is already moving in a similar policy direction regarding plastics and environmental impacts in agriculture. There is increasing focus within DEFRA on issues such as microplastics, diffuse agricultural pollution, soil health, and regenerative farming practices. While the UK may currently be progressing more gradually than the EU, the underlying policy objectives are increasingly aligned.
- **Recognition of renewable and biodegradable systems:** There is a significant opportunity for DEFRA to formally recognise renewable biogenic carbon as strategically important and to differentiate clearly between persistent fossil-based polymers and biodegradable renewable systems. Once this distinction is acknowledged within policy and regulation, it becomes increasingly difficult to justify maintaining a fundamentally different regulatory approach from the EU framework.

The EU FPR therefore represents not only a practical regulatory model, but also a strategically aligned framework that supports UK environmental ambitions, industrial competitiveness, innovation, and international trade.

We therefore view alignment as a mechanism to:

- accelerate innovation uptake
- reduce regulatory fragmentation
- improve environmental performance outcomes
- strengthen UK competitiveness in the bioeconomy sector

We also encourage Defra to explicitly clarify that conformity assessment applies to products (PFCs) rather than component materials (CMCs), ensuring consistency with EU interpretation and avoiding unnecessary regulatory expansion.

Section 2 – Conformity Assessment Framework

BBIA supports the proposed conformity-assessment-based structure for UK FPR.

A conformity-assessment-based model provides a more flexible and scalable approach than the current prescriptive framework and is capable of accommodating innovative fertilising products and technical materials.

However, it is important that conformity assessment processes remain proportionate, transparent, and accessible for SMEs and innovative technology developers.

We encourage Defra to avoid unnecessary duplication of EU conformity assessments, consider streamlined acceptance of equivalent EU evidence where appropriate, to wherever possible, streamline how manufacturers can evidence that their additive/CMC/PFC complies with relevant parts of UK FPR and (where they are also market the same product(s) for use in the EU) the EU FPR (as amended). We also ask that guidance is published early to maintain practical pathways for innovative products and provide clarity regarding assessment of technical additives and component materials.

Additional clarity is particularly needed regarding:

1. whether conformity assessment applies at Product Function Category (PFC) level, Component Material Category (CMC) level, or both;
2. how biodegradable polymeric additives will be assessed;
3. how water-soluble biodegradable polymers will be treated.

Additional technical note (CMC/PFC structure)

It appears that only products (PFCs) must undergo conformity assessment and UKCA marking before placement on the market, while CMCs are ingredients assessed within product conformity evaluation. However, current drafting is ambiguous and should explicitly confirm that only PFCs are subject to conformity assessment and UKCA marking.

Section 3 – Technical Requirements and Product Categories

BBIA broadly supports alignment of UK technical requirements and product categories with those established under the EU Fertilising Products Regulation.

The EU framework has already undergone extensive scientific review and stakeholder consultation involving the European Commission, the Joint Research Centre (JRC), academic institutions, industry stakeholders, and environmental experts.

Divergence from the EU framework without clear scientific justification risks unnecessary regulatory complexity, increased costs for manufacturers, barriers to trade, delayed innovation, market confusion.

We therefore recommend that UK FPR adopts equivalent or substantially similar technical requirements wherever feasible.

Section 4 – Polymers for use in Coating Agents, improving Water Retention / Wettability of EU fertilising products and for use as binding materials in growing media

BBIA strongly supports inclusion of clear regulatory pathways for biodegradable polymers and biodegradable technical additives within UK FPR.

Recent EU delegated legislation has established scientifically robust biodegradability criteria for coating agents, polymers to aid water retention in / wettability of fertilising products, and for use as binding materials in growing media¹.

We strongly encourage Defra to adopt equivalent criteria within UK FPR. We support criteria including:

- high levels of biodegradation in relevant environmental compartments;
- time-bound degradation requirements;
- ecotoxicity testing;
- restrictions on persistent microplastic residues;
- appropriate water-solubility thresholds where relevant.

¹ [Study to assess biodegradability criteria for polymers used in EU fertilising products as coating agents or to increase the water retention capacity or wettability and of mulch films – Publications Office of the EU](#)

The UK should align with the delegated regulation EU 2024/2770 establishing biodegradability criteria for coating agents and water retention polymers that don't meet its definition for non-chemically modified polymers that are the result of a polymerisation process that has taken place in nature (see its Annex I, point 2(a) replacement for point 2 in the relevant part of the EU FPR).

Such alignment would reduce duplication of testing, facilitate trade, support innovation, maintain environmental protection and provide regulatory clarity.

Additional technical position (CMC 1 polymers)

In Defra's consultation document, CMC 1 currently excludes polymers except those that are "natural" polymer additives. Unlike the EU FPR's delegated regulation EU 2024/2770, it does not say that polymers that are both biodegradable and water-soluble but are not also natural polymers would be allowed to be used. This significantly restricts the available toolbox of polymeric technical additives.

We therefore recommend aligning with EU provisions by including CMC 9 biodegradability criteria to:

- (a) control the water penetration into nutrient particles and thus the release of nutrients (in which case the polymer is commonly referred to as a 'coating agent'),
- (b) increase the water retention capacity or wettability of the EU fertilising product

The EU FPR (regulation 2019/1009) Annex II, Part II, CMC 9 (polymers other than nutrient polymers), paragraph 3 requires that coating agent polymers, polymers to enhance water retention/wettability and their degradation by-products do not show any overall adverse effect on animal or plant health or on the environment under reasonably foreseeable conditions of use in the EU fertilising product. It specifies test types - plant growth acute toxicity, earthworm acute toxicity and nitrification inhibition - and associated pass/fail criteria.

(Polymers used for binding purposes are not required to undergo those tests and pass the associated criteria because the products in which they are used are required to be soundly disposed of after end of use and end-users must be instructed not to use the product in contact with soil (details are in Annex II of delegated regulation EU 2024/2770).)

UK fertilisers regulation alignment with the relevant parts of the EU FPR and its delegated regulation EU 2024/2770 would improve innovation potential while maintaining environmental safeguards.

The delegated regulation requires that any coating agent, water retention/wettability or binding-function polymers used in an EU fertilising product are natural polymers (defined in para 2(a), amending the EU FPR) OR biodegradable polymers (as per associated biodegradability criteria set in the delegated regulation's Appendix 1), from 17 October 2028 (a 4 year transition timescale). Similar provisions in updated UK fertiliser regulation should also allow a reasonable transition timescale.

We note technical workshops (including Workshop 8 – Additives under CMC 1) will be important for refining these provisions. The BBIA asks to be included in Workshop 8.

Section 5 – Biodegradable Mulch Films and Agricultural Plastics

BBIA recommends that Defra establish a pathway towards future inclusion of mulch films, certified biodegradable in soil and aquatic environmental compartments meeting the FPR criteria for biodegradability, within the UK FPR framework. This would be consistent with evolving EU policy. In addition, relevant parts of the EU FPR, as amended by EU delegated regulation 2024/2787, provide a strong regulatory foundation for biodegradable mulch films.

Biodegradable mulch films can provide significant environmental and operational benefits compared with conventional polyethylene agricultural films. Benefits include no need for film retrieval and disposal, lower labour and machinery requirements, reduced risk of residual plastic contamination and accumulation in agricultural soils, and support for sustainable farming systems^{2,3}.

Conventional plastic mulch films are frequently difficult and costly to recycle because of soil stuck to the film and plant material that has grown through it, and costly to collect because of the distance to a suitable plastic recycling facility. Used, dark-coloured mulch films are limited to recycling into dark-coloured, low plastic-grade products due to soil and plant material adhered to them. Evidence increasingly demonstrates that plastic accumulation in soils adversely affects soil quality and biodiversity, and that crop productivity may be adversely affected.

BBIA strongly emphasises the importance of distinguishing certified biodegradable products from oxo-degradable plastics. Oxo-degradable plastics fragment into microplastics and do not biodegrade in natural environments such that they meet the recognized biodegradability standards (EN 17033 or ISO 23517) or EU FPR biodegradability criteria.

We therefore support explicit exclusion of oxo-degradable plastics, robust certification requirements for biodegradability, ecotoxicity testing and clear environmental safety requirements, as reported by EU FPR.

Section 6 – Compost, Digestate and Circular Economy Materials

BBIA supports the continued development of clear regulatory pathways for compost, anaerobic digestate, other types of bulky organic fertilisers, recycled nutrient products, biological and circular-economy-derived materials.

The UK FPR should actively support circular economy objectives and nutrient and organic matter recycling – since these products can contribute to reduced dependence on imported mineral fertilisers, improved nutrient circularity, lower greenhouse gas emissions, improved soil organic matter, and improved soil health and resilience.

We encourage Defra to continue engagement with the composting, anaerobic digestion, and organics recycling sectors.

² [From full-scale composting of Organic Fraction of Municipal Solid Waste \(OFMSW\) with compostable plastic packaging to field application: Effects on wheat growth and rhizosphere microbiome structure – ScienceDirect](#)

³ [From full-scale composting of Organic Fraction of Municipal Solid Waste \(OFMSW\) with compostable plastic packaging to field application: Effects on wheat growth and rhizosphere microbiome structure – ScienceDirect](#)

Section 7 – Biostimulants

BBIA welcomes the inclusion of biostimulants within UK FPR. Biostimulants have significant potential to improve nutrient use efficiency, enhance crop resilience, reduce nutrient losses, support lower-input farming systems, and contribute to climate resilience.

A clear and proportionate route to market for biostimulants is essential. We recommend close alignment with EU definitions and approaches to plant biostimulants.

Section 8 – Enforcement and Transitional Arrangements

BBIA supports proportionate enforcement arrangements that maintain market confidence while avoiding unnecessary administrative burden.

We encourage Defra to:

- provide clear implementation timelines;
- publish guidance early;
- recognise equivalent EU technical evidence where appropriate;
- ensure SMEs are not disproportionately burdened;
- maintain stakeholder engagement throughout implementation.

A practical and well-managed transition period will be essential to minimise disruption and encourage industry uptake.

Section 9 – Evidence and Further Technical Engagement

We encourage Defra to draw upon existing scientific work already completed at EU level, including:

- European Commission technical studies;
- Joint Research Centre (JRC) reports;
- Supporting evidence underpinning EU delegated regulations;
- Academic studies
- UK and EU field studies on biodegradable mulch films;

We also encourage ongoing engagement with:

- academic researchers;
- environmental NGOs;
- farmers and grower organisations;
- composting and anaerobic digestion sectors; and
- experts in bio-based polymers, biodegradable polymers and the products in which they are used or can be used.

Recommendations

BBIA recommends that Defra and the devolved administrations:

1. Align UK FPR closely with the EU Fertilising Products Regulation framework;
2. Adopt equivalent biodegradability criteria for coating agents and water retention polymers;
3. Provide clear regulatory pathways for biodegradable polymeric technical additives, as is already evaluated in the EN and ISO standards' criteria for mulch films and by certification schemes);
4. Establish a future pathway for certified biodegradable mulch films, in line with the biodegradability criteria in the EU FPR;
5. Explicitly exclude oxo-degradable plastics from qualifying biodegradable materials;
6. Support circular-economy fertilising products including compost, digestate, and recovered nutrients;
7. Maintain proportionate conformity assessment requirements;
8. Recognise equivalent EU technical evidence where appropriate;
9. Ensure strong stakeholder engagement throughout implementation;
10. Publish detailed technical guidance as early as possible.

Conclusion

BBIA welcomes Defra's ambition to modernise UK fertiliser regulation and create a framework that supports innovation, environmental protection, and sustainable agriculture.

The UK now has an important opportunity to establish a scientifically robust and internationally aligned regulatory framework that supports:

- Reduced environmental pollution;
- Improved soil health;
- Greater nutrient circularity;
- Reduced microplastic contamination;
- Sustainable agricultural innovation;
- Increased market confidence in novel fertilising products.

Alignment with the EU FPR and related delegated regulations would provide an efficient and credible basis for achieving these objectives while minimising unnecessary regulatory burden.

We would welcome continued engagement with Defra and the devolved administrations as the framework develops.

Key Supporting References

UK Consultation Documents

1. Defra. *UK Fertilisers Regulatory Reform Consultation*. Available at: <https://consult.defra.gov.uk/fertilisers-team/uk-fertilisers-regulatory-reform/>
2. UK Government. *Marketing fertilising products in the UK – regulatory reform consultation overview*. Available at: <https://www.gov.uk/government/consultations/marketing-fertilising-products-in-the-uk-regulatory-reform>

EU Legislation and Delegated Regulations

3. European Union. *Regulation (EU) 2019/1009 laying down rules on the making available on the market of EU fertilising products*. Official Journal of the European Union. Available at: <https://eur-lex.europa.eu/eli/reg/2019/1009/oj/eng>
4. European Union. *Commission Delegated Regulation (EU) 2024/2770 supplementing Regulation (EU) 2019/1009 with criteria on biodegradability for coating agents and water retention polymers*. Official Journal of the European Union. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202402770
5. European Union. *Delegated Regulation relating to biodegradability criteria for coating agents and water retention polymers*. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202402787

Industry and Technical Sources

6. European Bioplastics. *European Bioplastics welcomes the inclusion of soil-biodegradable products in the Fertilising Products Regulation (FPR)*. Available at: <https://www.european-bioplastics.org/eubp-welcomes-the-inclusion-of-soil-biodegradable-products-in-the-fertilising-products-regulation-fpr/>
7. Foresight®. *EU Tightens Biodegradability Standards for Coating Agents and Water Retention Polymers in Fertilisers*. Available at: <https://foresightdk.com/eu-tightens-biodegradability-standards-for-coating-agents-and-water-retention-polymers-in-fertilisers/>

Appendix 1

Biodegradability criteria for polymers referred to in section CMC 9, point 1(a) and (b)

1. The biodegradability of polymers referred to in section CMC 9, point 1(a) and (b) shall be demonstrated in the following two environmental compartments:

- (a) Compartment 1: soil; and
- (b) Compartment 2: fresh, estuarine or marine water.

2. The polymer shall achieve:

(a) in compartment 1:

- (1) ultimate degradation of at least 90 % relative to the degradation of the reference material within 48 months plus the functionality period (FP) as indicated on the label; or
- (2) mineralisation of at least 90 %, measured as evolved CO₂, over a maximum of 48 months plus the functionality period (FP) as indicated on the label;

(b) in compartment 2, ultimate degradation relative to the degradation of the reference material in 12 months as set out in the following table:

Criterion assessed	Pass criterion (FP = 0)	Pass criterion (FP = 1 month)	Pass criterion (FP = 2 months)	Pass criterion (FP = 3 months)	Pass criterion (FP ≥ 6 months)
Minimum target degradation after 12 months	≥ 43,8%	≥ 41,0%	≥ 38,1%	≥ 35,1%	≥ 25,0%

For functionality periods of less than 6 months, other than the ones set out in this table, the pass criteria shall be calculated using the following exponential decay formula:

$$TD_{12m} = 1 - \exp(-\lambda * (12 - FP))$$

where: TD_{12m} = the minimum target degradation after 12 months (expressed as a percentage),

λ = the degradation rate calculated as $\lambda = -\ln(0,1) / t_{90}$,

t_{90} = the time for 90 % biodegradation, which is 48 months,

FP = the functionality period (expressed in months).

4. When there is no phase transition (glass transition or melting transition) between 25 °C and 37 °C, the temperature during testing in accordance with points 3(a) or (b) may be adjusted at 37 °C.

In such a case, the relevant criterion in point 2(a) shall be considered as being demonstrated if the polymer achieves:

(a) at least 45 % ultimate degradation or mineralisation as referred to in point 2(a) in a separate test at 25 °C in 20 months, whereby degradation or mineralisation shall be progressing, and the plateau phase shall not have been reached, unless the degradation or mineralisation is at least 90 %; and

(b) one of the following criteria:

(i) ultimate degradation of at least 90 % relative to degradation of the reference material within 20 months plus the functionality period as indicated on the label; or

(ii) mineralisation of at least 90 %, measured as evolved CO₂, over a maximum of 20 months plus the functionality period as indicated on the label.

5. To demonstrate the biodegradability criteria in point 2(b), one of the following test methods shall be used:

(a) EN/ISO 14851:2019 Determination of the ultimate aerobic biodegradability of plastic materials in an aqueous medium. Method by measuring the oxygen demand in a closed respirometer;

(b) EN/ISO 14852:2021. Determination of the ultimate aerobic biodegradability of plastic materials in an aqueous medium. Method by analysis of evolved carbon dioxide;

(c) ASTM D6691:2018 Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials in the Marine Environment by a Defined Microbial Consortium or Natural Sea Water Inoculum.

6. For polymers referred to in section CMC 9, point 1(a), the test shall be performed on a material consisting of:

(a) the polymer or polymers contained in or building a continuous coating on particles ('polymer particles') comparable in terms of composition, form, size and surface area to the coating agent present in the EU fertilising product;

(b) the isolated coating; or

(c) the polymer or the polymers in the form placed on the market where the core of the material is replaced by an inert material such as glass.

7. For polymers referred to in section CMC 9, point 1(b), the test shall be performed on a material consisting of the polymer in the form placed on the market.

8. The following materials may be used as reference materials:

(a) positive controls: biodegradable materials such as micro-crystalline cellulose powder, ashless cellulose filters or poly- β -hydroxybutyrate;

(b) negative controls: non-biodegradable polymers such as polyethylene or polystyrene.

Appendix 2

Biodegradability criteria of polymers for mulch films referred to in section CMC 9, point 1a

1. The biodegradability of polymers in mulch films referred to in section CMC 9, point 1a, shall be demonstrated in the following two environmental compartments:

- (a) compartment 1: soil;
- (b) compartment 2: fresh, estuarine or marine water, or water sediment interface.

2. The polymer shall achieve:

(a) in compartment 1:

- (1) ultimate degradation of at least 90 % relative to the degradation of the reference material within 24 months plus the functionality period of the product as indicated on the label; or
- (2) mineralisation of at least 90 %, measured as evolved CO₂, over a maximum of 24 months plus the functionality period of the product as indicated on the label:

(b) in compartment 2:

- (1) ultimate degradation of at least 30 % relative to the degradation of the reference material in 12 months; or
- (2) ultimate degradation of at least 90 % relative to the degradation of the reference material in 24 months plus the functionality period of the product as indicated on the label.

3. To demonstrate the biodegradability criteria in point 2(a), one of the following test methods shall be used:

- (a) EN ISO 17556:2019. Plastics – Determination of the ultimate aerobic biodegradability of plastic materials in soil by measuring the oxygen demand in a respirometer or the amount of carbon dioxide evolved;
- (b) ISO/CD 23517:2021. Plastics – Soil biodegradable materials for mulch films for use in agriculture and horticulture;
- (c) ASTM D5988-96:2018. Standard Test Method for Determining Aerobic Biodegradation in Soil of Plastic Materials.

4. When there is no phase transition (glass transition or melting transition) between 25 °C and 37 °C, the temperature during testing in accordance with points 3(a), (b) and (c) may be adjusted at 37 °C.

In such a case, the relevant criterion in point 2(a) shall be considered as being demonstrated if the polymer achieves:

- (a) at least 45 % ultimate degradation or mineralisation as referred to in point 2(a) in a separate test at 25 °C in 10 months, whereby degradation or mineralisation shall be progressing, and the plateau phase shall not have been reached, unless the degradation or mineralisation is at least 90 %; and
- (b) one of the following criteria:

(i) ultimate degradation of at least 90 % relative to degradation of the reference material within 10 months plus the functionality period of the product as indicated on the label; or

(ii) mineralisation of at least 90 %, measured as evolved CO₂, over a maximum of 10 months plus the functionality period of the product as indicated on the label.

5. To demonstrate the biodegradability criteria in point 2(b), one of the following test methods shall be used:

(a) EN/ISO 14851:2019 Determination of the ultimate aerobic biodegradability of plastic materials in an aqueous medium. Method by measuring the oxygen demand in a closed respirometer;

(b) EN/ISO 14852:2021 Determination of the ultimate aerobic biodegradability of plastic materials in an aqueous medium. Method by analysis of evolved carbon dioxide;

(c) ASTM D6691:2018 Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials in the Marine Environment by a Defined Microbial Consortium or Natural Sea Water Inoculum;

(d) EN/ISO 19679:2020 Plastics – Determination of aerobic biodegradation of non-floating plastic materials in a seawater/sediment interface – Method by analysis of evolved carbon dioxide;

(e) EN/ISO 18830:2017 Plastics – Determination of aerobic biodegradation of non-floating plastic materials in a seawater/sandy sediment interface – Method by measuring the oxygen demand in closed respirometer.

Polymers may be tested in any of the following forms:

(a) in the form of the film placed on the market;

(b) in a powder form of the milled film.

7. The following materials may be used as reference materials:

(a) positive controls: biodegradable materials such as micro-crystalline cellulose powder, ashless cellulose filters or poly- β -hydroxybutyrate;

(b) negative controls: non-biodegradable polymers such as polyethylene or polystyrene.

ANNEX III, Labelling requirements

This Annex sets out the labelling requirements for EU fertilising products. The requirements laid down in Part II and Part III of this Annex for a given PFC, as specified in Annex I, apply to EU fertilising products in all subcategories of that PFC.

PART I, GENERAL LABELLING REQUIREMENTS

1. The following information shall be provided:

(a) for EU fertilising products in PFC 1 to PFC 6, the designation as indicated in Part I of Annex I of the PFC corresponding to the product's claimed function;

(b) for EU fertilising products in PFC 7, the designations as indicated in Part I of Annex I of all the PFCs corresponding to the claimed functions of the component EU fertilising products;

(c) the quantity of the EU fertilising product, indicated by mass or volume;

- (d) instructions for intended use, including application rates, timing and frequency, and target plants or mushrooms;
- (e) recommended storage conditions;
- (f) for products containing a polymer belonging to CMC 9 in Part II of Annex II, the time period following use during which the nutrient release is being controlled or the water retention capacity is being increased (the 'functionality period'), which shall not be longer than the period between two applications in accordance with the use instructions referred to in point (d);
- (fa) for products belonging to PFC 3 containing a polymer referred to in Part II, section CMC 9, point 1a, of Annex II:
 - (a) the time period following use during which the soil improver will fulfil its function (the 'functionality period'), which shall not be longer than the period between two applications in accordance with the use instructions referred to in point (d) of this point;
 - (b) an instruction to apply the product in compliance with the buffer zones required for fertilising products in accordance with the relevant national rules or, in the absence of such rules, to apply the product at least 3 m from any surface water body;
 - (c) an instruction to follow the national measures on handling mulch films after their functionality period or, in the absence of such measures, to incorporate in soil the product after its functionality period and maintain it buried; [this from Annex II of EU 2024/2787 that amends the EU FPR]
- (g) any relevant information on measures recommended to manage risks to human, animal or plant health, to safety or to the environment; and
- (h) a list of all ingredients above 5 % by product weight in descending order of magnitude by dry weight, including the designations of the relevant CMCs as referred to in Part I of Annex II to this Regulation; where the ingredient is a substance or a mixture, it shall be identified as specified in Article 18 of Regulation (EC) No 1272/2008.