

EU Legislation on Maximum Residue Levels (MRLs) for Pesticides – principles and current developments

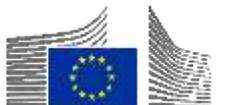
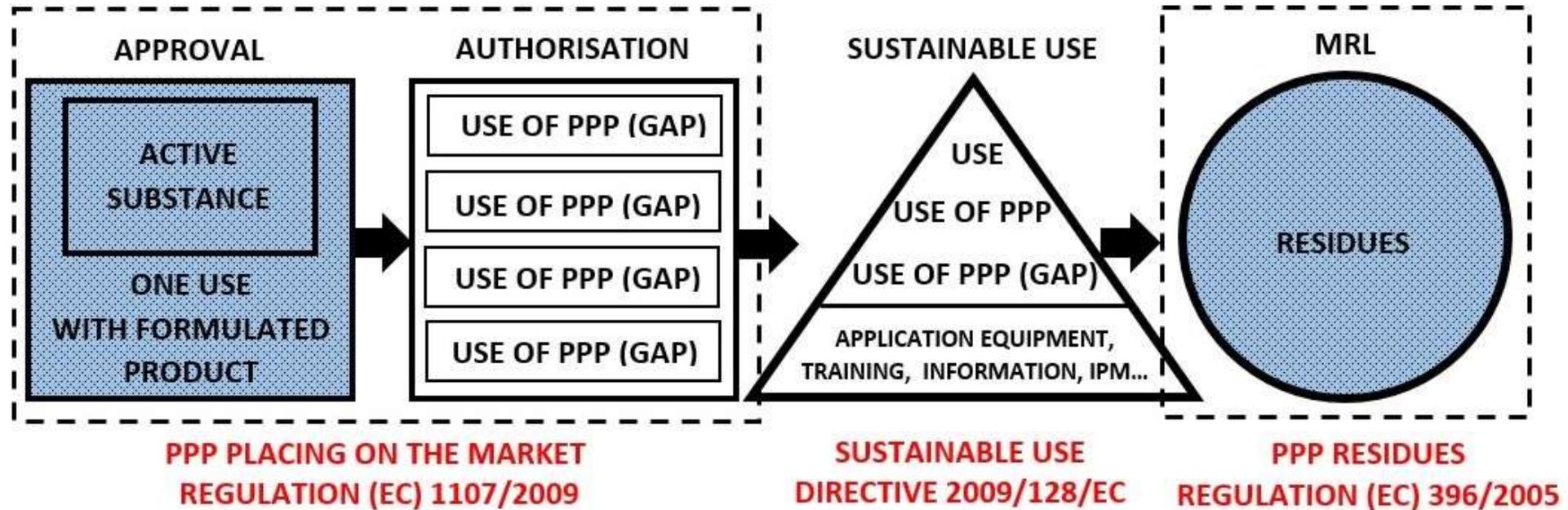
EUI Webinar ‘From Vision to Implementation: Pesticide Standards and International Trade’

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EU Pesticide Legislation



What is an MRL?

Maximum Residue Level: the highest level of a pesticide residue legally tolerated on food.

Example: MRL for pyriproxyfen on apples: 0.05 mg/kg

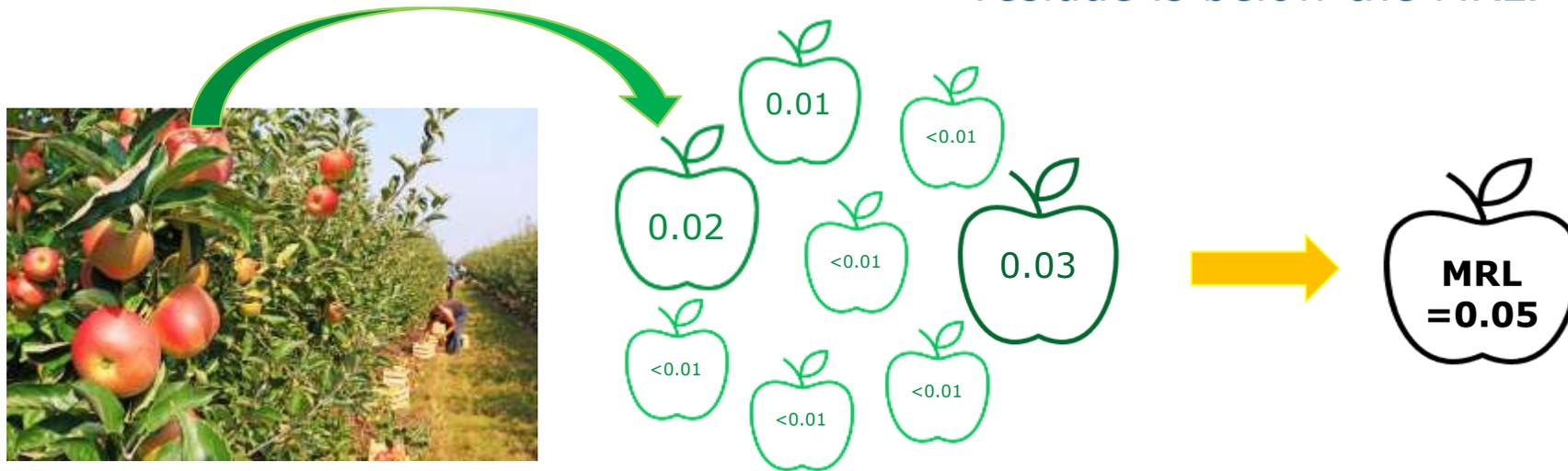


MRLs are set in Regulation (EC) No 396/2005 and can be reviewed at any moment.

MRLs are based on authorised uses

When a use (GAP) is submitted for authorisation, field trials are conducted to determine the level of residues left on the food.

A value for the MRL is derived using a statistical calculator (OECD). If the pesticide is used correctly following the GAP, the residue is below the MRL.



MRLs facilitate trade

- The main objective of the MRL Regulation (Regulation 396/2005) is to ensure consumer protection and public health
- MRLs also facilitate trade. MRLs can be based on:



- A use authorised in an EU Member State



- A use authorised in a non-EU country:

- submitted to the EU: “**import tolerance**”
- submitted to the Codex Alimentarius: “**CXL**”



MRLs ensure the protection of consumers

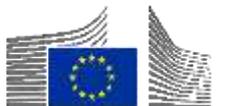
All food on the EU market have to comply with the EU MRLs.

- There is a MRL for each crop and pesticide combination:
 - Close to 200 000 MRLs altogether!
- If no MRL is set: a default value of 0.01 mg/kg applies.



And in reality?

- Pesticide residues are monitored by Member States.
- EFSA publishes the **European Union report on pesticide residues in food**
- For the 2024 report based on 2022 data:
 - 110 000 samples analysed
 - 59% with no quantifiable residues
 - 37% with residues not exceeding the MRL
- EFSA dietary risk assessment showed no health risk for consumers in the EU



Vision for Agriculture and MRLs

To ensure that the EU's concerns about animal welfare and environmental protection are considered, and to uphold EU's moral values in response to societal demand, the Commission will pursue, in line with international rules, **a stronger alignment of production standards applied to imported products, notably on pesticides and animal welfare.**

In that respect, the Commission will establish a principle **that the most hazardous pesticides banned in the EU for health and environmental reasons are not allowed back to the EU through imported products.** To advance on this, the Commission will launch in 2025 the **Impact Assessment that will consider the impacts on the EU's competitive position and the international implications** and, if appropriate, propose amendments to the applicable legal framework. Similarly, the Commission will also assess the issue of the export of hazardous chemicals, including pesticides, that are banned in the EU

A Vision for Agriculture and Food; COM (2025) 75



Food and Feed Safety Simplification Package

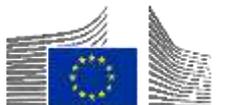
Current state of play:

- Substances not approved under Regulation (EC) No 1107/2009 due to particularly hazardous properties(*) may still be present in imported products, provided they comply with the MRLs in Regulation (EC) No 396/2005.
- In November 2025, Commission launched a study for preparing an impact assessment on implementing the principle announced in the Vision for Agriculture and Food the EU's competitive position and the international implications. If appropriate, consideration of amendments to the applicable legal framework.

Objectives of the measure proposed:

- Establish the possibility for implementation on a case-by-case basis of the principle announced in the Vision for Agriculture and Food that the most hazardous pesticides banned in the EU for health and environmental reasons will not be allowed back to the EU through imported products, if considered justified after an impact assessment
- When taking such approach, the Commission will provide adequate deferral periods and transitional measures to prevent disruptions to trade and allowing trade partners time to adjust
- Since the term “import tolerance” is often misunderstood, it is replaced for clarity by a reference to good agricultural practice in a third country.

(*) Substances with mutagenic or carcinogenic effects, substances toxic for reproduction, substances with endocrine disrupting properties in humans or in non-target organisms, persistent organic pollutants (POP), persistent, bioaccumulative and toxic (PBT) substances, and very persistent and very bioaccumulative substances (vPvB), based on scientific criteria listed in Regulation (EC) No 1107/2009



Other targeted amendments for MRLs

Allow for transitional measures in all cases where MRLs are lowered

- Currently, when MRLs are lowered for health reasons, food products produced before the date of applicability of the lower MRLs cannot be placed on the market anymore, even if they complied with the earlier (higher) MRLs that were applicable at the time of production
- This creates problems for long shelf-life products of high economic value such as wine, hops, oil that were compliant with earlier (higher) MRLs when produced, leading to economic losses and food waste.
- Allowing transitional measures (i.e. continued marketing of products compliant with earlier MRLs) in all cases is more proportionate, gives farmers and food business operators legal certainty and avoids food/economic losses.
- It will not have a significant impact on the level of protection of consumers as the most important contributors to dietary exposure are fresh products which are perishable.



Other targeted amendments for MRLs

Allow the setting of permanent MRLs based on monitoring data, instead of temporary MRLs

- Currently, the MRL Regulation allows to set MRLs based on monitoring data in specific cases, but these are temporary.
- A review of MRLs after a certain period of time is mandatory and requires resources, but is not meaningful for certain substances where no changes occur. Therefore, reviews should be done in a more flexible way, case-by-case. Since permanent MRLs can be reviewed at any time, it is not necessary to set temporary MRLs.
- This approach does not compromise the high level of consumer protection, while simultaneously alleviating administrative burdens for food business operators and Member States.

Align the terminology of the technical zero by applying the term limit of quantification (LOQ)

- Currently, the MRL Regulation uses “limit of determination (LOD)”, while the correct analytical term is “limit of quantification (LOQ)”. This is confusing as the acronym LOD is also the abbreviation for the “limit of detection“, which is different.



Some useful links to take away

- All MRLs are listed in the [EU MRL database](#).
- All active substances are listed in the [EU active substance database](#).
- All risk assessments for active substances and MRLs are published on the [EFSA website](#).
- Ongoing discussions with the Member States are published in the minutes of the SCoPAFF meetings on the [Commission website](#).
- Draft Regulations under discussion are published in the [EU comitology register](#).
- Draft Regulations are notified to non-EU countries via the WTO Agreements on [Sanitary and Phytosanitary Measures \(SPS\)](#) or [Technical Barriers to Trade \(TBT\)](#).
- Food and feed Simplification package: https://food.ec.europa.eu/horizontal-topics/simplification-legislation_en



Thank you



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