Embassy of India
Belgium, Luxembourg & the European Union

Pesticide Monitoring

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EU Updates on Active Substances

Fenpyrazamine: change in approval condition[1]

It is used as a fungicide in glasshouses on tomato, aubergine, pepper and cucurbits with edible peel, and field use on grapes.

- Effective date: 6 July 2021 (for amendment or with-drawal of existing authorisations for plant protection products containing Fenpyrazamine); 6 July 2022 (for grace period given, if any)
- Reason for change: The impurity hydrazine, a starting material, is of toxicological concern, and hence, the maximum content of this impurity in the technical material has been limited to 1 mg/kg.
- Potential Effect: This decision only concerns the placing on the market of this substance and plant protection products containing it and does not affect the Maximum Residue Levels (MRLs) for residues of the concerned pesticide; the impurity was considered not to be new in the commercial produced batches.

***Allium cepa* L. bulb extract : approval of the basic substance**[2] Allium cepa L. bulbs (onions) are a common foodstuff. Although as of now, it is not predominantly used for plant protection purposes, but the extract can be useful in plant protection (especially as a fungicide in potatoes, tomatoes, and cucumbers) in a product consisting of the substance.

- Effective date: 16thFeb 2021

Garlic extract: renewal of the approval Garlic extract is used as a repellent, insecticide and nematicide on a wide range of crops in agriculture and horticulture.

- Effective date: 1st March 2021

Akanthomyces muscarius strain Ve6: renewal of the approval Akanthomyces muscarius strain Ve6 substance (formerly Lecanicillium muscarium strain Ve6) is a worldwide occurring fungus, first isolated in 1979 from the glasshouse whitefly. It is used as insecticide against thrips and whitefly in fruiting vegetables of cucurbitaceae with edible and inedible peel, fruiting vegetables of solanaceae, strawberries, floriculture crops (except roses), cut roses and tree nursery.

- Effective date: 1st March 2021

***24-epibrassinolide:* approval of the active substance** It is a type of brassinosteroid, a natural occurring plant hormone. It enhances the plant's ability to protect against abiotic stresses and to improve plant health. It has effective use as an elicitor on grapes, leafy vegetables, sugar beet.

- Effective date: 30th March 2021

1 EU Regulation 2021/ 459 dated 16 March 2021 https://eur-lex.europa.eu/eli/reg_impl/2021/459/oj
2 EU Regulation 2021/81 dated 27 January 2021 https://eur-lex.europa.eu/eli/reg_impl/2021/81/oj
3 EU Regulation 2021/129 dated 3 February 2021 https://eur-lex.europa.eu/eli/reg_impl/2021/129/oj
4 EU Regulation 2021/ 134 dated 4 February 2021 https://eur-lex.europa.eu/eli/reg_impl/2021/134/oj
5 EU Regulation 2021/427 dated 10 March 2021 https://eur-lex.europa.eu/eli/reg_impl/2021/427/oj

EU Active Substance Renewal Monitor

Extension of the approval periods[6]:

The European Commission has extended the approval period of following active substances because their renewal assessment has been delayed for reasons beyond the control of the applicants.

Active substances	Validity of approval
Mecoprop-P	31/01/2022
Pyraclostrobin	
Metiram	
Oxamyl	
Dimoxystrobin	
Flutolanil	28/02/2022
Benfluralin	
Fluazinam	
Mepiquat	

Active substance due for renewal	
Active Substance	**Deadline for submitting renewal application**
1,4-Dimethylnaphthalene	30-6-2021
Pyridalyl	
Spinetoram	
Thiencarbazone	
Valifenalate	
Prosulfuron	31-07-2021
Spirotetramat	
Tembotrione	
Zinc phosphide	
Acequinocyl	31-08-2021
6-Benzyladenineb	
Dodine	
Flubendiamide	
Fluometuron	
Hexythiazox	
Isoxaben	
Ipconazole	
Lime sulfur	
Pendimethalin	
Tau-Fluvalinate	
Tebufenozide	

EU Updates on MRLs

The EU's review system of MRLs in food is very complex. The Applicants such as. producers of plant protection products, farmers, importers, EU or non-EU countries are required to submit the following for the setting of MRLs for pesticides:

- The use of a pesticide on the crop e.g., quantity, frequency, growth stage of the plant (Good Agricultural Practice - GAP);
- Experimental data on the expected residues when the pesticide is applied according to GAP;
- Toxicological reference values for the pesticide. Chronic toxicity is measured with the Acceptable Daily Intake (ADI), acute toxicity - with the Acute Reference Dose (ARfD).

Based on the available information, the intake of residues through all food that may be treated with that pesticide is compared with the ADI and ARfD for long and short-term intake and for all European consumer groups.

6 EU Regulation 2021/52 dated 22 January 2021 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R0052&from=EN

7 EU Regulation (2020/1566) dated 27th October: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R1566

MRL revisions for approved active substances[7]: The MRLs of following substances has been re-assessed and revised for selected products. EU Member States, third countries and food business operators must ensure their products comply with the new requirements.

Bupirimate a fungicide used in apples, pears, stone fruit and roses. EC has proposed to use two separate residue definitions, 'bupirimate' and 'ethirimol', in order to cover the presence of the metabolite ethirimol from the use of bupirimate in commodities of plant origin. MRLs of several products has been lowered (as given in table) while for others it is either raised or kept unchanged. MRLs for grapes, aubergines and products of animal origin will be reviewed again within two years on account of unavailability of information at the time of review.

Ethirimol is a fungicide used a seed treatment which is the major degradation product of bupirimate. Like Bupirimate, certain MRLs have been lowered, some have been kept unchanged, while some will be reviewed within two years.

Pyriofenone is a fungicide developed for the control of powdery mildew in cereals and grape vines. Most MRLs are defaulted to Limit of determination (LoD), with few exceptions as listed in the table. For animal products MRLs will be reviewed again within two years on account of unavailability of information at the time of review.

Carfentrazone-ethyl is a contact herbicide used to control broadleaf and sedge weeds in cereals. The residue definition has been changed to consider metabolite viz., sum of Carfentrazone-ethyl and Carfentrazone, expressed as carfentrazone-ethyl.

- Effective Date: 17 May 2021

Pesticides	Commodity	New MRLs (mg/kg)
Bupirimate	Strawberry Blackberry & Dewberry Other small fruits and berries Tomatoes Sweet peppers/ bell peppers Cucurbits with edible peels	1.5 0.7 1.5 0.8 1.5 1.5
Ethirimol	Apples & Pears Apricots & peaches Blackberry & dewberry Tomatoes Sweet peppers Cucurbits with edible peels	0.06 0.04 0.07 0.01 0.09 0.05
Pyriofenone	Tea, Coffee, herbal infusions, hops, spices, honey and other apiculture products	0.05
Carfent-zone-ethyl	Citrus fruits Tree nuts Pomme fruits, small fruits and berries Vegetable fresh and frozen Herbs and edible flowers Pulses and oilseeds Spices	0.02 0.05 0.02 0.02 0.04 0.05 0.1

MRLs for non-approved active substances[8]: The approval of following active substances was not renewed/was never there. Hence, all MRLs are lowered to the default level of 0.01mg/kg or Limit of analytical determination with one exception as given in the table.

Carbon tetrachloride was widely used as a grain and animal feed fumigant for post-harvest storage either alone or mixed with other substances.

Chlorothalonil, a commonly used fungicide used to control a wide range of diseases on a broad range of crops. Also used as a wood preservative.

8 Regulation 2021/155 dated 9 February 2021 https://eur-lex.europa.eu/eli/reg/2021/155/oj

9 https://www.eurl-pesticides.eu/docs/public/home.asp?LabID=500&Lang=EN

Chlorpropham, a residual herbicide and potato sprout suppressant.

Dimethoate, an insecticide and acaricide used to control a wide range of pests and also a pesticide transformation product.

Ethoprophos is a broad-spectrum nematicide and insecticide used pre-planting to control nematodes and soil dwelling insects.

Fenamidone is a fungicide effective against Oomycete diseases such as downy mildew and certain leaf spot diseases.

Methiocarb is a molluscicide and insecticide for control of a variety of plant pests. It also has application as a pheasant repellent.

Omethoate is an insecticide and acaricide to control a wide range of pests on fruit, hops and other crops.

Propiconazole is a systemic fungicide with a broad range of activity and a wide range of agricultural cropping applications.

Pymetrozine is a novel azomethine insecticide suitable for use in integrated crop management to control aphids and other plant sucking pests.

- Effective Date: 2 September 2021

Pesticides	MRLs higher than default or LOD
Chlorpropham	Potatoes: 0.4mg/kg

From EU Reference Laboratories

Presence of Anthraquinone in Coffee and Tea samples: an improved methodology based on spectrometry and a pilot monitoring programme[9]

- Anthraquinone has been linked to potential adverse effects on human health and the environment. The most commonly employed methods for the analysis of coffee and tea cause the extraction of matrix interferents such as the methylxanthines caffeine and theobromine, which hinder the analysis of anthraquinone.
- A new manual extraction method – using ethyl acetate as the extraction solvent with a dispersive solid-phase extraction clean-up step based on primary–secondary amines – has been developed. The new developed method allows for the quantification of anthraquinone at 5 µg/kg concentration levels, four times lower than the current maximum residue limit for coffee and tea in the European Union (20 µg/kg). Alongside, a new automated extraction method has also been developed.
- Finally, a pilot monitoring programme of 90 coffee and tea samples from several countries within the European Union has been performed, in which anthraquinone has been detected in a concentration range of 5.1–18.8 µg kg−1 in 32% of the monitored samples, below the current 20 µg kg−1 maximum residue limit, and in 48% of the monitored tea samples, revealing the need for including anthraquinone in a more extensive monitoring programme of tea.

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9 https://www.eurl-pesticides.eu/docs/public/home.asp?LabID=500&Lang=EN