



Pesticide Monitoring

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EU Updates on Pesticides

Mancozeb: Non-renewal of the active substance¹

A fungicide for protecting a wide range of field crops, fruits, nuts, vegetables, and ornamental, etc. from fungal diseases has been widely used across the globe. As part of the group of chemicals called dithiocarbamates, the plant protection chemical has multi-site, protective action on contact.

- **Effective Date:** 4 Jan. 2021 (for non-approval of substance); 4 July 2021 (for withdrawal of authorisations for plant protection products containing Mancozeb); 4 January 2022 (for grace period given, if any)
- **Changes in Maximum Residue Limit (MRLs):** Current MRLs will continue during the grace period. Review process of existing MRLs has started and in accordance

with EU rules, thereafter, MRLs would be reduced to the Limit of Quantification (LOQ) or Limit of Detection (LOD).

- **Reason for non-approval:** Reproductive toxicity of category 1B and endocrine disrupting properties.
- **Usage in India:** Used in wide variety of crops such as grapes, potatoes, cereal, fruits etc.
- **Importance for Indian chemical industry:** India is the largest producer of Mancozeb worldwide and EU has been a major market of its exports. Mancozeb manufacturers from India have been investing extensively in the EU, forging strategic partnerships with local companies - acquisition of 'Agrowin' in Italy, being a key example.

Phasing out of Mancozeb in EU will affect Indian agricultural and agro-chemical exports.

EU Active Substance Renewal Monitor

Extension of the approval periods²

The European Commission has extended the approval period of various active substance. No application for further renewal of approval will be submitted by applicants, who had earlier submitted such applications, and following substances will be phased out of EU.

Active substances	Validity of Approval
Calcium Phosphide and Denathonium Benzoate	31/08/2022
Zeta-cypermethrin	30/11/ 2021
Imidacloprid	31/07/2022
Pencycuron	31/05/2024
Haloxyfop-P	31/12/2023

¹ EU Regulation 2020/2087 dated 14 December 2020 https://eur-lex.europa.eu/eli/reg_impl/2020/2087/oj

² EU Regulation 2020/1643 dated 5 November 2020 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R1643>

EU News Corner

EU plans to list Chlorpyrifos in the Stockholm Convention on Persistent Organic Pollutants (POPs)

- On 23 July 2020, the MRLs of Chlorpyrifos in EU was reduced to default level of 0.01 mg/kg³. Now EU is scaling up its advocacy against Chlorpyrifos and aims to list it in the Stockholm convention on PoPs.
- The EU's comprehensive draft proposal⁴ indicates that chlorpyrifos exhibits acute and chronic effects at very low and environmentally relevant concentrations. Based on the persistence, potential for bioaccumulation, toxicity to aquatic organisms and in terrestrial animals (including humans) and the widespread occurrence in environmental compartments including remote regions, it is concluded that the use of chlorpyrifos is likely to lead to significant adverse human health and environmental effects such that global action is warranted.
- The pesticide is extensively used in many countries that would make it difficult to be a candidate for global action.

What is Stockholm Convention? It is a global treaty to protect human health and environment from POPs, which are identified chemical substances that persist in the environment, bio-accumulate in living organisms, adversely affect human health/environment, and have the property of long-range environmental transport (LRET).⁵

What are PoPs? Persistent Organic Pollutants (POPs) can lead to cancer, damage to central and peripheral nervous systems, diseases of immune system, reproductive disorders and child development. POPs are listed in various Annexes to the Stockholm Convention after thorough scientific research, deliberations, and negotiations among member countries.

What is India's stance on Stockholm Convention? India had ratified the Stockholm Convention on January 13, 2006, which enabled it to keep itself in a default "opt-out" position such that amendments in various Annexes of the convention cannot be enforced on it unless an instrument of ratification/acceptance/approval or accession is explicitly deposited with the UN depositary. Recently in Oct 2020, Cabinet ratified ban on seven POPs listed under Stockholm Convention and hazardous to health and environment. India seeks to demonstrate its commitment to meet its international obligations with regards to protection of environment and human health.

European Court of Justice upholds right of Member states to ban pesticides approved by the European Commission

- Active substances (chemicals or micro-organisms) that are used as essential ingredients in a pesticide are approved at EU level but the pesticides - that is, final products are authorised by national authorities in each EU country. In order for a pesticide to enter the market it needs to be authorised by the EU country where it will be used.
- EU rules allow Member States to refuse or restrict the sale of pesticides, based on the agricultural and environmental circumstances in their territory.

³ Regulation EU 2020/1085 dated 23 Jul 2020 – Refer to Vol1 Pesticide monitoring newsletter.

⁴ <https://echa.europa.eu/documents/10162/bb4342c2-64f1-d184-e8d8-334f02842f9b>

⁵ <https://www.financialexpress.com/lifestyle/science/union-cabinet-approves-ratification-of-stockholm-convention-bans-7-hazardous-chemicals/2100259/>

- Recent ruling of European Court of Justice (8 Oct. 2020), in the case by the French Chemical Industry against the ban of certain neonics in France in 2018; states that Member states have the right to ban pesticides even if they are permitted at the EU level but adoption of such emergency measures requires compliance with both the substantive conditions and procedural conditions as laid down in the EU Regulation 1107/2009⁶.
- The unilateral protective measures can be invoked by Member States if they have previously raised concerns about an active substance with the Commission and the Commission does not adopt protective measures.
- MRLs are not in scope of this decision. However, emergency measures for MRLs follow a familiar procedure as the active ingredient.

EFSA publishes risk report on cumulative effects of pesticides⁷

- Presently, the assessment of the level of risk for consumer health is based on a substance-by-substance assessment of acute and chronic exposure to pesticide residues.
- EU intends to develop a methodology for assessing the cumulative and synergistic effects (also known as 'the cocktail effect') of multiple pesticide residues that can be used to review the approval of an active substance and for consequent MRL setting.
- The European Food Safety Authority (EFSA) carried out two pilot studies on cumulative effects of pesticides and risk posed to human health - one, considering chronic effects on the thyroid system and

the other, on acute effects on the nervous system. The overall conclusion for both assessments is that consumer risk from dietary cumulative exposure is, with varying degrees of certainty, below the threshold that triggers regulatory action for all the population groups covered. Assessments covering the effects of pesticides on other organs and body functions will follow in the coming years.

- A study like this warns us that there could be likely shift in approach in EU to analyse active substances – EU may consider evaluating the toxicity of pesticide formulations as sold and used rather than just the isolated "active" ingredients that are tested and assessed for safety in regulatory purposes – since the formulations can be far more toxic.

Targeting Insect Hormones for Green Pesticides⁸

- With emphasis on minimal use of chemical pesticides, EC funded a research program on Novel biocontrol agents for insect pests from neuroendocrinology (nEUROSTRESSPEP) under the Horizon 2020 Research and Innovation Programme.
- Based on the cutting-edge technologies focussed on the insects' own peptide hormones and their synthetic mimetics, the project provided new bio-stable, bioavailable candidate peptide analogues for identifying new and 'greener' ways of controlling pest insect populations. These bio-pesticides target some insects while protecting others and can potentially be used in agriculture, horticulture and even forestry without causing harm.

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009R1107>

⁷ <https://www.efsa.europa.eu/en/news/pesticides-first-cumulative-risk-reports-published>

⁸ <http://www.neurostresspep.eu/home>

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