



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 180

[EPA-HQ-OPP-2023-0554; FRL-13184-01-OCSP]

#### Pyridate; Pesticide Tolerances

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This regulation revises a use of pyridate on mint (with tolerances on mint, fresh leaves and mint, dried leaves); a crop group expansion to field corn subgroup 15-22C; and a crop group conversion to vegetable, *brassica*, head and stem, group 5-16, which includes a tolerance on orphan crop kohlrabi. The Interregional Project Number 4 (IR-4) requested this tolerance under the Federal Food, Drug, and Cosmetic Act (FFDCA).

**DATES:** This regulation is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Objections and requests for hearings must be received on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the **SUPPLEMENTARY INFORMATION**).

**ADDRESSES:** The docket for this action, identified by docket identification (ID) number EPA-HQ-OPP-2023-0554, is available at <http://www.regulations.gov> or in-person at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave., NW., Washington, DC 20460-0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number

for the Public Reading Room and the OPP Docket is (202) 566-1744. For the latest status information on EPA/DC services, docket access, visit <https://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:** Charles Smith, Director, Registration Division (7505T), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001; main telephone number: (202) 566-1030; email address: [RDFRNotices@epa.gov](mailto:RDFRNotices@epa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. General Information**

#### *A. Does this Action Apply to Me?*

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

- Crop production (NAICS code 111).
- Animal production (NAICS code 112).
- Food manufacturing (NAICS code 311).
- Pesticide manufacturing (NAICS code 32532).

#### *B. How Can I Get Electronic Access to Other Related Information?*

You may access a frequently updated electronic version of EPA's tolerance regulations at 40 CFR part 180 through the Federal Register's e-CFR site at <https://www.ecfr.gov/current/title-40>.

#### *C. How Can I File an Objection or Hearing Request?*

Under FFDCA section 408(g), 21 U.S.C. 346a(g), any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. You must file your objection or request a hearing on this regulation in accordance with the instructions provided in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket ID number EPA-HQ-OPP-2023-0554 in the subject line on the first page of your submission. All objections and requests for a hearing must be in writing and must be received by the Hearing Clerk on or before *[insert date 60 days after date of publication in the **Federal Register**]*. Addresses for mail and hand delivery of objections and hearing requests are provided in 40 CFR 178.25(b).

EPA's Office of Administrative Law Judges (OALJ), in which the Hearing Clerk is housed, urges parties to file and serve documents by electronic means only, notwithstanding any other particular requirements set forth in other procedural rules governing those proceedings. See "Revised Order Urging Electronic Service and Filing", dated June 22, 2023, which can be found at <https://www.epa.gov/system/files/documents/2023-06/2023-06-22%20-%20revised%20order%20urging%20electronic%20filing%20and%20service.pdf>. Although EPA's regulations require submission via U.S. Mail or hand delivery, EPA intends to treat submissions filed via electronic means as properly filed submissions; therefore, EPA believes the preference for submission via electronic means will not be prejudicial. When submitting documents to the OALJ electronically, a person should utilize the OALJ e-filing system at [https://yosemite.epa.gov/OA/EAB/EAB-ALJ\\_Upload.nsf/HomePage?ReadForm](https://yosemite.epa.gov/OA/EAB/EAB-ALJ_Upload.nsf/HomePage?ReadForm).

In addition to filing an objection or hearing request with the Hearing Clerk as described in 40 CFR part 178, please submit a copy of the filing (excluding any Confidential Business Information (CBI)) for inclusion in the public docket. Information not marked confidential pursuant to 40 CFR part 2 may be disclosed publicly by EPA without prior notice. Submit the non-CBI copy of your objection or hearing request, identified by docket ID number EPA-HQ-OPP-2023-0554, by one of the following methods:

- *Federal eRulemaking Portal*: <http://www.regulations.gov>. Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be CBI or other information whose disclosure is restricted by statute.

- *Mail*: OPP Docket, Environmental Protection Agency Docket Center (EPA/DC), (28221T), 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001.

- *Hand Delivery*: To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at <http://www.epa.gov/dockets/where-send-comments-epa-dockets>.

Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at <http://www.epa.gov/dockets>.

## **II. Summary of Petitioned-For Tolerance**

In the ***Federal Register*** of July 1, 2024 (89 FR 54398) (FRL-11682-05-OCSP), EPA issued a document pursuant to FFDC section 408(d)(3), 21 U.S.C. 346a(d)(3), announcing the filing of a pesticide petition (PP3E9077) by Interregional Project Number 4 (IR-4), North Carolina State University, 1730 Varsity Drive, Venture IV, Suite 210 Raleigh, NC 27606. The petition requested that 40 CFR 180.462 be amended to establish tolerances for residues of the herbicide pyridate, *O*-(6-chloro-3-phenyl-4-pyridazinyl)-*S*-octyl-carbonothioate, and its metabolites, 6-chloro-3-phenyl-pyridazine-4-ol and conjugates of 6-chloro-3-phenyl-pyridazine-4-ol, calculated as the stoichiometric equivalent of pyridate, in or on the raw agricultural commodities: field corn subgroup 15-22C at 0.03 ppm; kohlrabi at 0.03 ppm; mint, dried leaves at 15 ppm; mint, fresh leaves at 3 ppm; and vegetable, brassica, head and stem, group 5-16 at 0.03 ppm. Upon establishment of the aforementioned tolerances, the petition requested the removal of the established tolerances for the residues of pyridate, including its metabolites and degradates, in or on the following commodities: brassica, head and stem, subgroup 5A at 0.03 parts per million (ppm); cabbage at 0.03 ppm; corn, field, grain at 0.03 ppm; corn, pop, grain at 0.03 ppm;

peppermint, tops at 0.20 ppm; and spearmint, tops at 0.20 ppm. That document referenced a summary of the petition prepared by IR-4, the petitioner, which is available in the docket, <http://www.regulations.gov>. There were no comments received in response to the notice of filing.

Based upon review of the data supporting the petition and in accordance with its authority under FFDCa section 408(d)(4)(A)(i), EPA is establishing the tolerances for residues of pyridate on mint, dried and mint, fresh at a different level than petitioned-for. The reasons for these changes are explained in Unit IV.C.

### **III. Aggregate Risk Assessment and Determination of Safety**

Section 408(b)(2)(A)(i) of FFDCa allows EPA to establish a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the tolerance is “safe.” Section 408(b)(2)(A)(ii) of FFDCa defines “safe” to mean that “there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.” This includes exposure through drinking water and in residential settings but, does not include occupational exposure. Section 408(b)(2)(C) of FFDCa requires EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to “ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue....”

Consistent with FFDCa section 408(b)(2)(D), and the factors specified therein, EPA has reviewed the available scientific data and other relevant information in support of this action. EPA has sufficient data to assess the hazards of and to make a determination on aggregate exposure for pyridate including exposure resulting from the tolerances established by this action. EPA's assessment of exposures and risks associated with pyridate follows.

In an effort to streamline its publications in the ***Federal Register***, EPA is not reprinting sections that repeat what has been previously published for tolerance rulemakings for the same pesticide chemical. Where scientific information concerning a particular chemical remains unchanged, the content of those sections would not vary between tolerance rulemakings, and EPA considers referral back to those sections as sufficient to provide an explanation of the information EPA considered in making its safety determination of the new rulemaking.

EPA has previously published a number of tolerance rulemakings for pyridate in which EPA concluded, based on the available information, that there is a reasonable certainty that no harm would result from aggregate exposure to pyridate and established a tolerance for residues of that chemical. EPA is incorporating previously published sections from those rulemakings as described further in this rulemaking, as they remain unchanged.

#### *A. Toxicological Profile*

Since the toxicological doses and endpoints for pyridate have not changed since the most recent risk assessment, see Unit III.A. of the May 25, 2022 rulemaking (87 FR 31738) (FRL-9298-02-OCSP) for a discussion of the Toxicological Profile.

#### *B. Toxicological Points of Departure/Levels of Concern.*

For a summary of the Toxicological Points of Departure/Levels of Concern for pyridate used for human health risk assessment, see Unit III.B. of the May 25, 2022, rulemaking.

#### *C. Exposure Assessment*

Much of the exposure assessment remains unchanged from the previous rulemakings, although updates have occurred to accommodate for exposures from the petitioned-for tolerance and additional exposures from the tolerances established since the May 25, 2022, rulemaking. For a description of EPA's approach to and assumptions for the exposure assessment, refer to Unit III.C. of the May 25, 2022 rulemaking.

EPA's dietary exposure assessments have been updated to include the additional exposure from the new use of pyridate in or on mint, dried leaves; mint, fresh leaves; field corn subgroup 15-22C; kohlrabi; and vegetable, brassica, head and stem, group 5-16 and the exposure assessed in rulemakings since 2022. In conducting the acute and chronic dietary exposure assessments, EPA used the Dietary Exposure Evaluation Model software using the Food Commodity Intake Database (DEEM-FCID), Version 4.02, which uses the 2005–2010 food consumption data from the United States Department of Agriculture (USDA) National Health and Nutrition Examination Survey, What We Eat in America (NHANES/WWEIA). The acute and chronic dietary exposure assessments are unrefined, assuming tolerance-level residues and 100 percent crop treated (PCT).

#### *D. Drinking water exposure*

The new use does not result in an increase in the estimated residue levels in drinking water, so EPA used the same estimated drinking water concentrations in the acute and chronic dietary exposure assessments as identified in Unit III.C.2 of the May 25, 2022 rulemaking.

#### *E. Non-occupational exposure*

Non-occupational short-term exposures resulting from spray drift from agricultural applications onto residential areas may occur. Occupational handler and post-application exposures are expected based on the existing use pattern. Based on the use patterns (i.e., one to two applications per season), resistance management practices, and the duration of exposure for the proposed food use, exposure is expected to be short-term (1 to 30 days) and intermediate-term (1 to 6 months). Long-term exposures (greater than 6 months) are not anticipated. While there are currently registered uses of pyridate that could result in the potential for occupational, residential, and non-occupational bystander spray drift exposures, the proposed tolerance and PHI adjustments are not expected to result in greater exposures than those calculated in the previously assessed non-dietary exposure pathways.

#### *F. Cumulative exposure*

Section 408(b)(2)(D)(v) of FFDCA requires that, when considering whether to establish, modify, or revoke a tolerance, the Agency consider “available information” concerning the cumulative effects of a particular pesticide's residues and “other substances that have a common mechanism of toxicity.” Unlike other pesticides for which EPA has followed a cumulative risk approach based on a common mechanism of toxicity, EPA has not made a common mechanism of toxicity finding as to pyridate and any other substances and pyridate does not appear to produce a toxic metabolite produced by other substances. For the purposes of this action, therefore, EPA has not assumed that pyridate has a common mechanism of toxicity with other substances.

#### *G. Safety Factor for Infants and Children*

Section 408(b)(2)(C) requires the application of an additional tenfold margin of safety to account for potential risks to infants and children, in the case of threshold effects. EPA continues to conclude that there are reliable data to support the reduction of the Food Quality Protection Act (FQPA) safety factor from 10X to 1X. See Unit III.D. of the May 25, 2022 rulemaking for a discussion of the Agency's rationale for that determination.

#### *H. Aggregate Risks and Determination of Safety*

EPA determines whether acute and chronic dietary pesticide exposures are safe by comparing dietary exposure estimates to the acute population adjusted dose (aPAD) and the chronic population adjusted dose (cPAD). Short-, intermediate-, and chronic term aggregate risks are evaluated by comparing the estimated total food, water, and residential exposure to the appropriate points of departure to ensure that an adequate margin of exposure (MOE) exists.

The unrefined acute dietary risk estimates are below the Agency's level of concern (<100% aPAD) at the 95<sup>th</sup> exposure percentile for the general U.S. population (15% of the aPAD)

and for all infants (<1-year-old) (53% of the aPAD), the most highly exposed population subgroup. Chronic dietary risks are below the Agency's level of concern of 100% of the cPAD; they are 31% of the cPAD for children 1 to 2 years old, the population group with the highest estimated exposure. There is no short- or intermediate-term residential exposure expected since there are no proposed or previously registered residential uses of pyridate. Therefore, the chronic aggregate risks consist only of the dietary risks from food and water and as stated above, are below the Agency's level of concern.

Pyridate is classified as "not likely to be carcinogenic to humans"; therefore, a cancer dietary assessment is not needed.

Therefore, based on the risk assessments and information described above, EPA concludes there is a reasonable certainty that no harm will result to the general population, or to infants and children, from aggregate exposure to pyridate residues, including its metabolites and degradates. More detailed information about the Agency's analysis can be found at <https://www.regulations.gov> in the document titled "Pyridate. Human Health Risk Assessment for the Interregional Research Project No. 4 (IR-4) Proposed New Tolerances for Residues in/on Mint and Crop Group Expansions for *Brassica* Head and Stem Group 5-16, Field Corn Subgroup 15-22C, and Kohlrabi." in docket ID number EPA-HQ-OPP-2023-0554.

#### **IV. Other Considerations**

##### *A. Analytical Enforcement Methodology*

For a discussion of the available analytical enforcement method, see Unit IV.A. of the May 25, 2022, rulemaking.

##### *B. International Residue Limits*

In making its tolerance decisions, EPA seeks to harmonize U.S. tolerances with international standards whenever possible, consistent with U.S. food safety standards and agricultural practices. EPA considers the international maximum residue limits (MRLs)

established by the Codex Alimentarius Commission (Codex), as required by FFDCa section 408(b)(4).

There are currently no Codex MRLs established for residues of pyridate. Canadian MRLs are established for residues of pyridate on mint commodities at the same level as the existing U.S. tolerances. As this action is a joint review between PMRA and EPA, the revised mint tolerances will be harmonized between the U.S. and Canada. Therefore, there are no issues with harmonization.

### *C. Revisions to Petitioned for Tolerances*

EPA is establishing tolerances for mint, dried leaves and mint, fresh leaves at different levels than requested to harmonize with the Codex MRL.

For mint, dried leaves, IR-4 requested a tolerance of 15 ppm and for mint, fresh leaves, IR-4 requested a tolerance of 3 ppm. EPA is establishing the tolerance for mint, dried leaves at 30 ppm and for mint, fresh leaves at 6 ppm based on the OECD calculation procedures, after residue values were corrected due to dissipation during frozen storage so the levels recommended by EPA are higher than those proposed by the petitioner.

## **V. Conclusion**

Therefore, tolerances are established for residues of pyridate, including its metabolites and degradates, in or on field corn subgroup 15-22C at 0.03 ppm; kohlrabi at 0.03 ppm; mint, dried leaves at 30 ppm; mint, fresh leaves at 6 ppm; and vegetable, *brassica*, head and stem, group 5-16 at 0.03 ppm.

## **VI. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

### *A. Executive Order 12866: Regulatory Planning and Review*

This action is exempt from review under Executive Order 12866 (58 FR 51735, October 4, 1993), because it establishes or modifies a pesticide tolerance or a tolerance exemption under FFDCa section 408 in response to a petition submitted to the Agency. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866.

*B. Executive Order 14192: Unleashing Prosperity Through Deregulation*

Executive Order 14192 (90 FR 9065, February 6, 2025) does not apply because actions that establish a tolerance under FFDCa section 408 are exempted from review under Executive Order 12866.

*C. Paperwork Reduction Act (PRA)*

This action does not impose an information collection burden under the PRA 44 U.S.C. 3501 *et seq.*, because it does not contain any information collection activities.

*D. Regulatory Flexibility Act (RFA)*

Since tolerance actions that are established on the basis of a petition under FFDCa section 408(d), such as the tolerance in this final rule, do not require the issuance of a proposed rule, the requirements of the RFA, 5 U.S.C. 601 *et seq.*, do not apply to this action.

*E. Unfunded Mandates Reform Act (UMRA)*

This action does not contain an unfunded mandate of \$100 million or more (in 1995 dollars and adjusted annually for inflation) as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any State, local, or Tribal governments or on the private sector.

*F. Executive Order 13132: Federalism*

This action does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it will not have substantial direct effects on the States,

on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government.

*G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have Tribal implications as specified in Executive Order 13175 (65 FR 67249, November 9, 2000), because it will not have substantial direct effects on Tribal governments, on the relationship between the Federal Government and the Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes.

*H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because tolerance actions like this one are exempt from review under Executive Order 12866. However, EPA's 2021 *Policy on Children's Health* applies to this action. This rule finalizes tolerance actions under the FFDCA, which requires EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to "ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue ..." (FFDCA 408(b)(2)(C)). The Agency's consideration is summarized in Unit III.G.

*I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use*

This action is not subject to Executive Order 13211 (66 FR 28355) (May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

*J. National Technology Transfer Advancement Act (NTTAA)*

This action does not involve technical standards that would require Agency consideration under NTTAA section 12(d), 15 U.S.C. 272.

*K. Congressional Review Act (CRA)*

This action is subject to the CRA, 5 U.S.C. 801 *et seq.*, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

**List of Subjects in 40 CFR Part 180**

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: February 9, 2026.

**Charles Smith,**

*Director, Registration Division, Office of Pesticide Programs.*

Therefore, for the reasons stated in the preamble, EPA is amending 40 CFR chapter I as follows:

**PART 180—TOLERANCES AND EXEMPTIONS FOR PESTICIDE CHEMICAL RESIDUES IN FOOD**

1. The authority citation for part 180 continues to read as follows:

**Authority:** 21 U.S.C. 321(q), 346a and 371.

2. In § 180.462, amend table 1 to paragraph (a) by:

a. Removing the entries for “Brassica, head and stem, subgroup 5A”, “Cabbage”, “Corn, field, grain”, “Corn, pop, grain”;

b. Adding in alphabetical order the entries for “Field corn subgroup 15-22C”, “Kohlrabi”, “Mint, dried leaves”, “Mint, fresh leaves”;

c. Removing the entries for “Peppermint, tops” and “Spearmint, tops”; and

d. Adding in alphabetical order the entry for “Vegetable, *brassica*, head and stem, group 5-16”.

The additions read as follows:

**§ 180.462 Pyridate; tolerances for residues.**

(a) \* \* \*

**Table 1 to Paragraph (a)**

Commodity	Parts per million
* * *	* * * *
Field corn subgroup 15-22C	0.03
* * *	* * * *

Kohlrabi	0.03
* * * * *	
Mint, dried leaves	30
Mint, fresh leaves	6
* * * * *	
Vegetable, <i>brassica</i> , head and stem, group 5-16	0.03
* * * * *	

\* \* \* \* \*

[FR Doc. 2026-03938 Filed: 2/26/2026 8:45 am; Publication Date: 2/27/2026]