E 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA-HQ-OPP-2022-0575; FRL-12591-01-OCSPP]

Metamitron; Pesticide Tolerances

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes tolerances for residues of metamitron in or on apple and pear. ADAMA AGAN c/o Makhteshim Agan of North America, Inc. (d/b/a ADAMA) requested these tolerances 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-2022-0575, is available online at *https://www.regulations.gov*. Additional information about dockets generally, along with instructions for visiting the docket in-person, is available at 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.*

SUPPLEMENTARY INFORMATION:

I. Executive Summary

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).

If you have any questions regarding the applicability of this proposed action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

B. *What is EPA's authority for taking this action?*

This tolerance action is issued pursuant to section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a et seq., and EPA regulations in 40 CFR part 180. FFDCA section 408(b)(2)(A)(i) 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...."

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. If you fail to file an objection to the final rule within the time period specified in the final rule, you will have waived the right to raise any issues resolved in the final rule. 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-2022-0575 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*]**.

The 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 Filing and Service," 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 the EPA's regulations require submission via U.S. Mail or hand delivery, the EPA intends to treat submissions filed via electronic means as properly filed submissions; therefore, the 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*.

II. Summary of Petitioned-For Tolerance

In the **Federal Register** of August 30, 2022 (87 FR 52868) (FRL-9410-04-OCSPP), EPA issued a document pursuant to FFDCA section 408(d)(3), 21 U.S.C. 346a(d)(3), announcing the filing of a pesticide petition (PP 1F8977) by ADAMA AGAN c/o Makhteshim Agan of North America, Inc. (d/b/a ADAMA), 8601 Six Forks Road, Suite 300, Raleigh, NC 27615. The

petition requested that 40 CFR part 180 be amended by establishing tolerances for residues of the herbicide metamitron, including its metabolites and degradates, in or on pome fruit (crop group 11–10) at 0.01 parts per million (ppm). That document referenced a summary of the petition prepared by ADAMA, the registrant, which is available in the docket. There were no comments received in response to the request for comments on the petition that published on August 30, 2022.

On August 5, 2024, following conversations with EPA, ADAMA informed the Agency that they wish to modify their petition to instead establish tolerances on apple and pear at 0.01 ppm. Because the tolerance petition originally published for public comment contains both of these commodities in crop group 11-10, EPA did not request additional comment after that change.

III. Aggregate Risk Assessment and Determination of Safety

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 metamitron including exposure resulting from the tolerances established by this action. EPA's assessment of exposures and risks associated with metamitron follows.

A. *Toxicological Profile*

EPA has evaluated the available toxicity data and considered its validity, completeness, and reliability as well as the relationship of the results of the studies to human risk. EPA has also considered available information concerning the variability of the sensitivities of major identifiable subgroups of consumers, including infants and children.

The liver is the main target organ in both subchronic and chronic toxicity studies in all three species tested (rat, mouse, dog) with gall bladder toxicity only observed in the dog. Neurotoxicity (clinical signs and functional observational battery (FOB) findings) was also observed following an acute exposure (single dose) in both mice and rats. In addition to target

organ toxicity, decreased body weights were observed in rats and dogs. Across all three species tested, the severity of the adverse liver and body weight effects progressed across time and dose, with the rat and dog being more sensitive (i.e., effects were seen at lower doses) as compared to the mouse when allometric scaling is not considered. Females tended to be slightly more sensitive as compared to males and this sex difference may be due to the longer half-life and slower decline of metamitron *in vivo* in females.

Metamitron is classified as "Not Likely to Be Carcinogenic to Humans" based on a lack of treatment-related tumors in acceptable rat and mouse carcinogenicity studies and low concern for mutagenic potential.

Specific information on the studies received and the nature of the adverse effects caused by metamitron as well as the no-observed-adverse-effect-level (NOAEL) and the lowest-observed-adverse-effect-level (LOAEL) from the toxicity studies can be found on pages 12-20 in the document "Metamitron. Human Health Risk Assessment for First Food Use Petition for the Establishment of Permanent Tolerances and Registration for Uses on Apple and Pear. New Active Ingredient" hereinafter referred to as "Metamitron Human Health Risk Assessment" that is available in docket ID number EPA-HQ-OPP-2022-0575.

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

Once a pesticide's toxicological profile is determined, EPA identifies toxicological points of departure (POD) and levels of concern to use in evaluating the risk posed by human exposure to the pesticide. For hazards that have a threshold below which there is no appreciable risk, the toxicological POD is used as the basis for derivation of reference values for risk assessment. PODs are developed based on a careful analysis of the doses in each toxicological study to determine the dose at which no adverse effects are observed (the NOAEL) and the lowest dose at which adverse effects of concern are identified (the LOAEL). Uncertainty/safety factors are used in conjunction with the POD to calculate a safe exposure level - generally referred to as a population-adjusted dose (PAD) or a reference dose (RfD) - and a safe margin of exposure

(MOE). For non-threshold risks, the Agency assumes that any amount of exposure will lead to some degree of risk. Thus, the Agency estimates risk in terms of the probability of an occurrence of the adverse effect expected in a lifetime. For more information on the general principles EPA uses in risk characterization and a complete description of the risk assessment process, see *https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/assessing-human-health-risk-pesticides*.

A summary of the toxicological endpoints for metamitron used for human risk assessment can be found on pages 24–25 in the "Metamitron Human Health Risk Assessment."

C. *Exposure Assessment*

1. *Dietary exposure from food and feed uses*. In evaluating dietary exposure to metamitron, EPA considered exposure under the petitioned-for tolerances. EPA assessed dietary exposures from metamitron in food as follows:

i. *Acute and chronic exposure*. Quantitative acute dietary exposure and risk assessments are performed for a food-use pesticide, if a toxicological study has indicated the possibility of an effect of concern occurring as a result of a 1-day or single exposure. Such effects were identified for metamitron. In estimating the acute and chronic dietary exposure, EPA used food consumption information from the United States Department of Agriculture (USDA) 2005-2010 National Health and Nutrition Examination Survey, What We Eat in America (NHANES/WWEIA). As to residue levels in food, EPA conducted unrefined acute and chronic dietary exposure assessments for the proposed new uses on apples and pears, based on combined level of quantification (LOQ) field trial residues from parent compound metamitron and the metabolite desamino-metamitron, default processing factors, and assumed 100 percent crop treated (PCT).

ii. *Cancer*. Based on the data summarized in Unit III.A., EPA has concluded that metamitron does not pose a cancer risk to humans. Therefore, a dietary exposure assessment for the purpose of assessing cancer risk is unnecessary.

iii. *Anticipated residue and percent crop treated (PCT) information*. EPA did not use anticipated residue and/or PCT information in the dietary assessment for metamitron. Tolerance level residues and/or 100% CT were assumed for all food commodities.

2. *Dietary exposure from drinking water*. The Agency used screening level water exposure models in the dietary exposure analysis and risk assessment for metamitron in drinking water. These simulation models take into account data on the physical, chemical, and fate/transport characteristics of metamitron. Further information regarding EPA drinking water models used in pesticide exposure assessment can be found at *https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/models-pesticide-risk-assessment.*

Based on the Pesticide Water Calculator (PWC) model (ver. 2.001) and new drinking water scenarios, the estimated drinking water concentrations (EDWCs) of metamitron for acute exposures from applications to apples and pears are estimated to be 17 parts per billion (ppb) for surface water and 19 ppb for ground water, and for chronic exposures for non-cancer assessments are estimated to be 5.3 ppb for surface water and 5.2 ppb for ground water. EPA used EDWCs for sugar beet from a previously issued Section 18 Emergency Exemption to represent protective high-end estimates for the proposed use on apples and pears as well as sugar beet. The sugar beet surface water EDWCs of 91 ppb for acute and 61 ppb for chronic drinking water exposure were directly incorporated into the assessments since surface water models for sugar beet gave ~1.6 times higher water concentrations than those from ground water models for sugar beet, and ~5 times higher water concentrations than surface water and groundwater EDWCs from apples and pears.

3. *From non-dietary exposure*. The term "residential exposure" is used in this document to refer to non-occupational, non-dietary exposure (*e.g.*, for lawn and garden pest control, indoor pest control, termiticides, and flea and tick control on pets). Metamitron is not registered for any specific residential use patterns that would result in residential exposure.

4. *Cumulative effects from substances with a common mechanism of toxicity*. 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."

EPA has not found metamitron to share a common mechanism of toxicity with any other substances, and metamitron does not appear to produce a toxic metabolite produced by other substances. For the purposes of this tolerance action, therefore, EPA has assumed that metamitron does not have a common mechanism of toxicity with other substances. For information regarding EPA's efforts to determine which chemicals have a common mechanism of toxicity and to evaluate the cumulative effects of such chemicals, see EPA's website at https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/cumulative-assessment-risk-pesticides. As part of the ongoing process to review registered pesticides, the Agency intends to apply this framework to determine if the available toxicological data for metamitron suggests a candidate common mechanism group (CMG) may be established with other pesticides. If a CMG is established, a screening-level toxicology and exposure analysis may be conducted to provide an initial screen for multiple pesticide exposure.

D. *Safety Factor for Infants and Children*

1. *In general*. Section 408(b)(2)(C) of FFDCA provides that EPA shall apply an additional tenfold (10X) margin of safety for infants and children in the case of threshold effects to account for prenatal and postnatal toxicity and the completeness of the database on toxicity and exposure unless EPA determines based on reliable data that a different margin of safety will be safe for infants and children. This additional margin of safety is commonly referred to as the Food Quality Protection Act (FQPA) Safety Factor (SF). In applying this provision, EPA either retains the default value of 10X, or uses a different additional safety factor when reliable data available to EPA support the choice of a different factor.

2. *Prenatal and postnatal sensitivity*. There is no evidence of increased susceptibility

following *in utero* exposure to metamitron in either the rat or rabbit developmental toxicity studies up to the highest doses tested, and there is no evidence of increased quantitative susceptibility following *in utero* and/or pre-/post-natal exposure in the multi-generation reproduction studies in rats. All offspring effects were observed at the same or higher dose level than maternal toxicity. Evidence of qualitative sensitivity was demonstrated in a multigeneration reproductive toxicity study, as decreased offspring survival was observed in the absence of comparable parental toxicity. However, the concern is low as the sensitivity was observed at a higher dose level than the established LOAEL/NOAEL for the parental generation, a clear NOAEL/LOAEL has been established for the offspring generation, and all selected endpoints are protective of the qualitative sensitivity.

3. *Conclusion*. EPA has determined that reliable data show the safety of infants and children would be adequately protected if the FQPA SF were reduced to 1X. That decision is based on the following findings:

i. The toxicity database for metamitron is complete and adequate to characterize potential pre- and postnatal toxicity to infants and children.

ii. Neurotoxicity (clinical signs and functional observational battery (FOB) findings) was observed following an acute exposure (single dose) in both mice and rats. In a metabolism study, reduced mobility and piloerection were observed after a single oral dose, but the effects resolved within 24 hours post-dosage. No additional potentially neurotoxic effects were observed across the metamitron database, including the rat subchronic neurotoxicity study (SCN), at the doses tested. The concern for neurotoxicity is low, as all selected PODs are protective of the adverse effects identified in the non-guideline studies and the metabolism study.

iii. There is no evidence that metamitron results in increased quantitative susceptibility in rats or rabbits in the prenatal developmental studies. Evidence of qualitative sensitivity was demonstrated in a multigeneration reproductive toxicity study, as decreased offspring survival was observed in the absence of comparable parental toxicity. However, the concern is low as the

sensitivity was observed at a higher dose level than the established LOAEL/NOAEL for the parental generation, a clear NOAEL/LOAEL has been established for the offspring generation, and all selected endpoints are protective of the qualitative sensitivity.

iv. There are no residual uncertainties identified in the exposure databases. The dietary food exposure assessments were performed based on 100 PCT, field trial level residues, and upper-bound estimates of potential exposure through drinking water. EPA made conservative (protective) assumptions in the ground and surface water modeling used to assess exposure to metamitron in drinking water. These assessments will not underestimate the exposure and risks posed by metamitron.

E. *Aggregate Risks and Determination of Safety*

EPA determines whether acute and chronic dietary pesticide exposures are safe by comparing aggregate exposure estimates to the acute PAD (aPAD) and chronic PAD (cPAD). For linear cancer risks, EPA calculates the lifetime probability of acquiring cancer given the estimated aggregate exposure. Short-, intermediate-, and chronic-term risks are evaluated by comparing the estimated aggregate food, water, and residential exposure to the appropriate PODs to ensure that an adequate MOE exists.

1. *Acute risk.* Using the exposure assumptions discussed in this unit for acute exposure, the acute dietary exposure from food and water to metamitron will occupy 5.6% of the aPAD for all infants (<1 year old), the population group receiving the greatest exposure.

2. *Chronic risk*. Using the exposure assumptions described in this unit for chronic exposure, EPA has concluded that chronic exposure to metamitron from food and water will utilize 5.3% of the cPAD for all infants (<1 year old), the population group receiving the greatest exposure. There are no residential uses for metamitron.

3. *Short-term and intermediate-term risk*. Short-term aggregate exposure takes into account short-term residential exposure plus chronic exposure to food and water (considered to be a background exposure level). Intermediate-term aggregate exposure takes into account

intermediate-term residential exposure plus chronic exposure to food and water (considered to be a background exposure level). Since there are no proposed residential uses for metamitron that would result in short- or intermediate-term residential exposures, and chronic dietary exposure has already been assessed under the appropriately protective cPAD (which is at least as protective as the POD used to assess short- and intermediate-term risk), no further assessment of short- or intermediate-term risk is necessary, and EPA relies on the chronic dietary risk assessment for evaluating short- and intermediate-term risk for metamitron**.**

4. *Aggregate cancer risk for U.S. population*. Based on the lack of evidence of carcinogenicity in two adequate rodent carcinogenicity studies and the low concern for mutagenic potential, metamitron is not expected to pose a cancer risk to humans; therefore, a separate cancer assessment was not conducted.

5. *Determination of safety*. Based on these risk assessments, EPA concludes that there is a reasonable certainty that no harm will result to the general population, or to infants and children from aggregate exposure to metamitron residues.

IV. Other Considerations

A. *Analytical Enforcement Methodology*

Adequate enforcement methodology (high-performance liquid chromatography with tandem mass spectrometry detection (LC/MS/MS) (Method SGS-17-01-03)) is available to enforce the tolerance expression. The method may be requested from: Chief, Analytical Chemistry Branch, Environmental Science Center, 701 Mapes Rd., Ft. Meade, MD 20755-5350; telephone number: (410) 305-2905; email address: residuemethods@epa.gov.

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). The Codex Alimentarius is a joint United Nations Food and Agriculture Organization/World Health Organization food standards program, and it is recognized as an international food safety standards-setting organization in trade agreements to which the United States is a party. EPA may establish a tolerance that is different from a Codex MRL; however, FFDCA section 408(b)(4) requires that EPA explain the reasons for departing from the Codex level.

The Codex has not established a MRL for metamitron.

V. Conclusion

Therefore, tolerances are established for residues of metamitron, including its metabolites and degradates, in or on apple and pear at 0.01 ppm.

VI. Statutory and Executive Order Reviews

This action establishes tolerances under FFDCA section 408(d) 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, entitled "Regulatory Planning and Review" (58 FR 51735, October 4, 1993). Because this action has been exempted from review under Executive Order 12866, this action is not subject to Executive Order 13211, entitled "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) or Executive Order 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997). This action does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA) (44 U.S.C. 3501 *et seq*.).

Since tolerances and exemptions 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 Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq*.), do not apply.

This action directly regulates growers, food processors, food handlers, and food retailers,

not States or tribes, nor does this action alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of FFDCA section 408(n)(4). As such, the Agency has determined that this action will not have a substantial direct effect on States or Tribal governments, on the relationship between the national government and the States or Tribal governments, or on the distribution of power and responsibilities among the various levels of government or between the Federal Government and Indian tribes. Thus, the Agency has determined that Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999) and Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000) do not apply to this action. In addition, this action does not impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act (UMRA) (2 U.S.C. 1501 *et seq*.).

This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note).

VII. 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: March 3, 2025.

Edward Messina,

Director, 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 § 180.726, add paragraph (a) to read as follows:

§ 180.726 Metamitron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide metamitron, including its metabolites and degradates, in or on the commodities in table 1 to this paragraph (a). Compliance with the tolerance levels specified in table 1 to this paragraph (a) is to be determined by measuring residues of metamitron (4-amino-3-methyl-6-phenyl-1,2,4-triazin-5(4H)-one) in or on the following commodities:

Table 1 to Paragraph (a)

Commodity	Parts per million
Apple	0.01
Pear	0.01

* * * * *

[FR Doc. 2025-03872 Filed: 3/10/2025 8:45 am; Publication Date: 3/11/2025]