



BILLING CODE 6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 180**

**[EPA-HQ-OPP-2017-0314; FRL-9972-04]**

### **Methyl-alpha-D-mannopyranoside (Alpha Methyl Mannoside); Exemption from the Requirement of a Tolerance**

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

**ACTION:** Final rule.

**SUMMARY:** This regulation establishes an exemption from the requirement of a tolerance for residues of the biochemical methyl-alpha-D-mannopyranoside (alpha methyl mannoside) in or on all raw agricultural commodities when applied/used as a plant growth regulator. BRANDT iHammer submitted a petition to EPA under the Federal Food, Drug, and Cosmetic Act (FFDCA), requesting an exemption from the requirement of a tolerance. This regulation eliminates the need to establish a maximum permissible level for residues of alpha methyl mannoside.

**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-2017-0314, is available at <http://www.regulations.gov> or 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 is (202) 566-1744, and the telephone number for the OPP Docket is (703) 305-5805. Please review the visitor instructions and additional information about the docket available at <http://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:** Robert McNally, Biopesticides and Pollution Prevention Division (7511P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001; main telephone number: (703) 305-7090; email address: [BPPDFRNotices@epa.gov](mailto:BPPDFRNotices@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 40 CFR part 180 through the Government Printing Office's e-CFR site at <http://www.ecfr.gov/cgi-bin/text->

*idx?&c=ecfr&tpl=/ecfrbrowse/Title40/40tab\_02.tpl*. To access the OCSPP test guidelines referenced in this document electronically, please go to *http://www.epa.gov/ocspp* and select “Test Methods and Guidelines.”

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

Under FFDCFA section 408(g), 21 U.S.C. 346a, 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-2017-0314 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).

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-2017-0314, 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/contacts.html>. Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at <http://www.epa.gov/dockets>.

## II. Background and Statutory Findings

In the **Federal Register** of December 4, 2017 (82 FR 57193) (FRL-9970-76), EPA issued a document pursuant to FFDC section 408(d)(3), 21 U.S.C. 346a(d)(3), announcing the filing of a pesticide tolerance petition (PP 6F8506) by BRANDT iHammer, 479 Village Park Drive, Powell OH, 43065. The petition requested that 40 CFR part 180 be amended by establishing an exemption from the requirement of a tolerance for residues of alpha methyl mannoside. That document referenced a summary of the petition prepared by the petitioner, BRANDT iHammer, which is available in the docket, EPA-HQ-OPP-2017-0314, at <http://www.regulations.gov>. There were no comments received in response to the notice of filing.

Section 408(c)(2)(A)(i) of FFDC allows EPA to establish an exemption from the requirement for a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the exemption is “safe.” Section 408(c)(2)(A)(ii) of FFDC 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. Pursuant to FFDC section 408(c)(2)(B), in establishing or maintaining in effect an exemption from the requirement of a tolerance, EPA must take into account the factors set forth in FFDC section 408(b)(2)(C), which require 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....” Additionally, FFDCa section 408(b)(2)(D) requires that 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 performs a number of analyses to determine the risks from aggregate exposure to pesticide residues. First, EPA determines the toxicity of pesticides. Second, EPA examines exposure to the pesticide through food, drinking water, and through other exposures that occur as a result of pesticide use in residential settings.

### **III. Toxicological Profile**

Consistent with FFDCa section 408(b)(2)(D), EPA has reviewed the available scientific data and other relevant information in support of this action and considered its validity, completeness and reliability, and the relationship of this information to human risk. Given that no toxic endpoints were identified for alpha methyl mannoside, consideration of the variability of the sensitivities of major identifiable subgroups of consumers, including infants and children is not necessary for this biochemical pesticide.

#### *A. Overview of Methyl-alpha-D-mannopyranoside (alpha methyl mannoside)*

Methyl-alpha-D-mannopyranoside (alpha methyl mannoside) is a naturally occurring monosaccharide (simple sugar), that is ubiquitous in plant tissue in the form of mannose polymers. Alpha methyl mannoside exposure occurs naturally via diet from the breakdown of mannose polymers present in a variety of plant-based foods, with the highest concentrations found in guar gum, a common food additive of thickening and texture in baked goods, dairy items, meats and condiments, and in coffee. Alpha methyl mannoside appears to have a low toxicity profile and is not mutagenic. Alpha methyl mannoside has been recently found to regulate plant growth by modulating glycoconjugation to lectins in plants. As a pesticide, alpha

methyl mannoside appears to stimulates the growth and development of a range of crops including vegetables (leafy, *Brassica* leafy, cucurbit, fruiting), alfalfa, blueberries, cherries, corn, cotton, grapes, onions, peanuts, potatoes, sweet potatoes, and nonfood crops such as bedding plants cut flowers, ornamentals, and turf. Submitted information/data show that when applied to the root, shoot or seed of targeted plants, alpha methyl mannoside functions by displacing glucose bond to lectin. The data/information further show that release of glucose in the plant results in increased plant growth including increased yields of fruit, flower growth and turgidity in turf. In pesticide products, proposed application of alpha methyl mannoside is at rates ranging from 6 to 20 fl. oz. per acre for food crops and 0.1 to 1.13% for nonfood crops. At these rates, the use of alpha methyl mannoside should not likely result in significant residues, environmental persistence or bioaccumulation.

*B. Biochemical Pesticide Toxicology Data Review for Methyl-alpha-D-mannopyranoside*

All applicable toxicology data requirements supporting the petition to establish an exemption from the requirement of a tolerance for the use of alpha methyl mannoside as an active ingredient in or on food commodities, when used in accordance with label direction and good agricultural practices, have been fulfilled. Based on the submitted data and the results of the Agency-developed dietary exposure modeling database DEEM-FCID (version 3.16), dietary exposure to alpha methyl mannoside is not anticipated and there are no human health risks of concern associated with alpha methyl mannoside. Acute studies on alpha methyl mannoside show that this naturally occurring monosaccharide falls within Toxicology Category IV for: Acute oral toxicity, Acute dermal toxicity, Primary eye irritation, and Primary dermal irritation. alpha methyl mannoside is not a dermal sensitizer. Waivers were granted for subchronic toxicology studies including the 90-day Dermal study, 90-day Inhalation study and Developmental toxicity study. For a more detailed summary of the data upon which EPA relied, please refer to the

document entitled, “Federal Food, Drug, and Cosmetic Act (FFDCA) Considerations for Methyl-alpha-D-mannopyranoside (Alpha Methyl Mannoside)” December 5, 2017, available in the docket for this action (EPA-HQ-OPP-2017-0314).

#### **IV. Aggregate Exposures**

In examining aggregate exposure, FFDCA section 408 directs EPA to consider available information concerning exposures from the pesticide residue in food and all other non-occupational exposures, including drinking water from ground water or surface water and exposure through pesticide use in gardens, lawns, or buildings (residential and other indoor uses).

##### *A. Dietary Exposure*

An aggregate risk assessment for alpha methyl mannoside for dietary (food and drinking water) exposures was not conducted as no toxicological endpoints have been identified in the toxicity database.

##### *B. Other Non-Occupational Exposure*

Other non-occupational exposure to alpha methyl mannoside from pesticidal use is not expected to occur as alpha methyl mannoside biodegrades rapidly once applied which would preclude significant post-application exposure. Exposure is further minimized by the relatively low application rates proposed for this biochemical. There are no residential uses for Methyl-alpha-D-mannopyranoside. This biochemical is intended for agricultural, ornamental and turf crop use only. Therefore, the Agency does not anticipate residential exposure.

#### **V. 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 pesticide's residues and "other substances that have a common mechanism of toxicity."

EPA has not found alpha methyl mannoside to share a common mechanism of toxicity with any other substances, and alpha methyl mannoside does not appear to produce a toxic metabolite produced by other substances. For the purposes of this tolerance action, therefore, EPA has assumed that alpha methyl mannoside 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 <http://www.epa.gov/pesticides/cumulative>.

#### **VI. Determination of Safety for U.S. Population, Infants and Children**

FFDCA section 408(b)(2)(C) provides that, in considering the establishment of a tolerance or tolerance exemption for a pesticide chemical residue, EPA shall assess the available information about consumption patterns among infants and children, special susceptibility of infants and children to pesticide chemical residues, and the cumulative effects on infants and children of the residues and other substances with a common mechanism of toxicity. In addition, FFDCA section 408(b)(2)(C) 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 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 Safety Factor. In applying this provision, EPA either retains the default value of 10X, or uses a different additional or no safety factor when reliable data are available to support a different additional or no safety factor.

As part of its qualitative assessment, EPA evaluated the available toxicity and exposure data on alpha methyl mannoside and considered its validity, completeness, and reliability, as well as the relationship of this information to human risk. EPA considers the toxicity database to be complete and has identified no residual uncertainty with regard to prenatal and postnatal toxicity or exposure. No hazard was identified in the available studies; therefore, EPA concludes that there are no threshold effects of concern to infants, children, or adults from alpha methyl mannoside. As a result, EPA concludes that no additional margin of exposure (safety) is necessary.

## **VII. Other Considerations**

### *A. Analytical Enforcement Methodology*

An analytical method is not required for enforcement purposes since the Agency is establishing an exemption from the requirement of a tolerance without any numerical limitation.

### *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 alpha methyl mannoside.

### **VIII. Conclusions**

Based on its assessment of Methyl-alpha-D-mannopyranoside (alpha methyl mannoside or alpha methyl mannoside), 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 alpha methyl mannoside. Therefore, an exemption is established for residues of alpha methyl mannoside on all raw agricultural commodities when used in accordance with label directions and good agricultural practices.

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

This action establishes a tolerance 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.*, nor does it require any special considerations under Executive Order 12898, entitled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (59 FR 7629, February 16, 1994).

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).

#### **X. Congressional Review Act**

Pursuant to the Congressional Review Act (5 U.S.C. 801 *et seq.*), EPA has submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. 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 2, 2018.

Richard P. Keigwin, Jr.,  
*Director, Office of Pesticide Programs.*

Therefore, 40CFR chapter I is amended as follows:

**PART 180--[AMENDED]**

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

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

2. Add §180.1352 to subpart D to read as follows:

**§ 180.1352 Methyl-alpha-D-mannopyranoside (Alpha methyl mannoside); exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide Methyl-alpha-D-mannopyranoside (alpha methyl mannoside) are exempt from the requirement of a tolerance in or on all raw agricultural commodities.

[FR Doc. 2018-03671 Filed: 2/21/2018 8:45 am; Publication Date: 2/22/2018]