



Health
Canada

Santé
Canada

Notice of Modification to the *List of Permitted Food Additives with Other Accepted Uses* to Extend the Use of Sodium Phosphate, Tribasic to Certain Frozen Products

Notice of Modification – Lists of Permitted Food Additives

Reference Number: NOM/ADM-0166

April 27, 2021



Summary

Food additives are regulated in Canada under [Marketing Authorizations](#) (MAs) issued by the Minister of Health and the *Food and Drug Regulations* (Regulations). Approved food additives and their permitted conditions of use are set out in the [Lists of Permitted Food Additives](#) that are incorporated by reference in the MAs and published on the Canada.ca website. A petitioner can request that Health Canada approve a new additive or a new condition of use for an already approved food additive by filing a food additive submission with the Department's Food Directorate. Health Canada uses this premarket approval process to determine whether the scientific data support the safety of food additives when used under specified conditions in foods sold in Canada.

Health Canada's Food Directorate received a food additive submission seeking approval for the use of sodium phosphate, tribasic (also known as trisodium phosphate or TSP), to reduce processing losses and thaw drip in frozen shrimp and frozen cooked shrimp. The requested maximum level of use is 0.5% total added phosphate, calculated as sodium phosphate, dibasic. According to the petitioner the primary function of TSP is to maintain a stable, higher pH environment, which helps to restore the natural water retention capacity of muscle proteins and increase the functionality of pyro- or poly-phosphates.

In Canada, several phosphates¹ other than TSP are already permitted for the same purpose of use in frozen shrimp and frozen cooked shrimp as well as in frozen clams, frozen crab, frozen fish fillets, frozen lobster, frozen minced fish, and frozen squid. The results of the Food Directorate's evaluation of available scientific data support the safety and efficacy of sodium phosphate, tribasic, when used in combination with other phosphates, as set out in the table below. Therefore, Health Canada has modified the [List of Permitted Food Additives with Other Accepted Uses](#) to extend the use of sodium phosphate, tribasic, by adding the entry shown below to the list.

Modification to the *List of Permitted Food Additives with Other Accepted Uses*

Item No.	Column 1 Additive	Column 2 Permitted in or Upon	Column 3 Purpose of use	Column 4 Maximum Level of Use and Other Conditions
S.7.1	Sodium Phosphate, tribasic	Frozen clams; Frozen cooked shrimp; Frozen crab; Frozen fish fillets; Frozen lobster; Frozen minced fish; Frozen shrimp; Frozen squid	To reduce processing losses and to reduce thaw drip	In combination with other phosphates permitted by this list for the same purpose of use, the total added phosphate not to exceed 0.5%, calculated as sodium phosphate, dibasic

¹ Other phosphates permitted for this purpose of use are potassium pyrophosphate, tetrabasic, potassium tripolyphosphate, sodium acid pyrophosphate, sodium hexametaphosphate, sodium potassium hexametaphosphate, sodium potassium tripolyphosphate, sodium pyrophosphate, tetrabasic, sodium pyrophosphate, tribasic, sodium tripolyphosphate (see the [List of Permitted Food Additives with Other Accepted Uses](#)).

Consequential and Editorial Modifications

To maintain the alphabetical order of food additives in the English version of the [List of Permitted Food Additives with Other Accepted Uses](#), sodium phosphate, tribasic, needed to be inserted after sodium phosphate, dibasic and before sodium potassium hexametaphosphate. To have a simple item number sequence for the sodium phosphates and sodium potassium phosphates that are listed after sodium phosphate, dibasic (item no. S.7), and before sodium silicate (item no. S.8), sodium phosphate, tribasic, was inserted into the list as item no. S.7.1 and the item numbers for these other phosphates were revised as follows:

- Sodium potassium hexametaphosphate is now item no. S.7.2 (formerly item no. S.7.01);
- Sodium potassium tripolyphosphate is now item no. S.7.3 (formerly item no. S.7.02);
- Sodium pyrophosphate, tetrabasic, is now item no. S.7.4 (formerly item no. S.7.1);
- Sodium pyrophosphate, tribasic, is now item no. S.7.5 (formerly item no. S.7.2).

The same item number revisions were also made for these phosphates in the [French version](#) of the List.

Minor editorial changes were also made in the French version of the List. The word “calculé” was replaced with “calculée” in column 4 for subitems no. C.1(2), no. S.6(2), and no. S.13(1), revised subitem no. S.7.2(2) (formerly subitem no. S.7.01(2)), and items no. C.2, no. P.5, no. P.5.2, no. S.1.1, revised item no. S.7.3 (formerly no. S.7.02), revised item no. S.7.4 (formerly item no. S.7.1), revised item no. S.7.5 (formerly item no. S.7.2), and item no. S.11. The entry in column 2 for item no. S3A was revised to remove the hyphen in « hexaméta-phosphate » and to add « de », « le » and « les » where they had been missing. All these minor changes do not affect the permitted uses of the food additives.

Rationale

Health Canada’s Food Directorate completed a premarket safety of sodium phosphate, tribasic, when used in combination with other pyro- or polyphosphates that are already permitted for use to reduce processing losses and to reduce thaw drip. The assessment concluded that information related to allergenicity, chemistry, microbiology, nutrition and toxicology supports the safety of sodium phosphate, tribasic, for its requested use in frozen shrimp and frozen cooked shrimp as well as in certain other frozen marine and fresh water animal products that are already permitted to be treated with certain other phosphates to reduce processing losses and to reduce thaw drip. Therefore, the Department has enabled the uses of sodium phosphate, tribasic, shown in the above table by adding them to the [List of Permitted Food Additives with Other Accepted Uses](#).

Other Relevant Information

The *Food and Drug Regulations* require that food additives such as sodium phosphate, tribasic, that do not have food-grade specifications set out in Part B of the Regulations meet the food-grade specifications set out in the most recent edition of the *Food Chemicals Codex* or the *Combined Compendium of Food Additive Specifications*. The *Food Chemicals Codex* is a compendium of standards for purity and identity for food ingredients, including food additives, published by the United States Pharmacopeial Convention. The *Combined Compendium of Food Additive Specifications*, which contains specifications prepared by the Joint FAO/WHO Expert Committee on Food Additives (JECFA), is published by the Food and Agriculture Organization of the United Nations.

Implementation and Enforcement

The above modification came into force **April 27, 2021**, the day it was published in [List of Permitted Food Additives with Other Accepted Uses](#).

The Canadian Food Inspection Agency is responsible for the enforcement of the *Food and Drugs Act* and its associated regulations with respect to foods.

Contact Information

Health Canada's Food Directorate is committed to reviewing new scientific information on the safety in use of any permitted food additive, including sodium phosphate, tribasic. Anyone wishing to submit new scientific information on the use of this additive or to submit inquiries on this modification may do so in writing, by regular mail or electronically. If you wish to contact the Food Directorate electronically, please use the words "**Sodium phosphate, tribasic (NOM-0166)**" in the subject line of your e-mail.

[Bureau of Chemical Safety, Food Directorate](#)

251 Sir Frederick Banting Driveway

Tunney's Pasture, PL: 2202C

Ottawa, Ontario K1A 0K9

E-mail: hc.bcs-bipc.sc@canada.ca