Food and Drug Administration, HHS

§ 184.1097 Succinic acid.

(a) Succinic acid (C\textsubscript{4}H\textsubscript{6}O\textsubscript{4}, CAS Reg. No. 110–15–6), also referred to as amber acid and ethylenesuccinic acid, is the chemical 1,4-butanedioic acid. It is commercially prepared by hydrogenation of maleic or fumaric acid. It can also be produced by aqueous alkali or acid hydrolysis of succinonitrile.

(b) The ingredient meets the specifications of the “Food Chemicals Codex,” 3d Ed. (1981), pp. 314–315, which is incorporated by reference. Copies may be obtained from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or may be examined at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(c) The ingredient is used as a flavor enhancer as defined in §170.3(o)(11) of this chapter and pH control agent as defined in §170.3(o)(23) of this chapter.

(d) The ingredient is used in food at levels not to exceed good manufacturing practice in accordance with §184.1(b)(1). Current good manufacturing practice results in a maximum level, as served, of 0.084 percent in condiments and relishes as defined in §170.3(n)(8) of this chapter and 0.0061 percent in meat products as defined in §170.3(n)(29) of this chapter.

(e) Prior sanctions for this ingredient different from the uses established in this section do not exist or have been waived.

[44 FR 20657, Apr. 6, 1979, as amended at 49 FR 5611, Feb. 14, 1984]

§ 184.1095 Sulfuric acid.

(a) Sulfuric acid (H\textsubscript{2}SO\textsubscript{4}, CAS Reg. No. 7664–93–9), also known as oil of vitriol, is a clear, colorless, oily liquid. It is prepared by reacting sulfur dioxide (SO\textsubscript{2}) with oxygen and mixing the resultant sulfur trioxide (SO\textsubscript{3}) with water, or by reacting nitric oxide (NO) with sulfur dioxide and water.

(b) The ingredient meets the specifications of the “Food Chemicals Codex,” 3d Ed. (1981), pp. 317–318, which is incorporated by reference. Copies may be obtained from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or may be examined at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(c) The ingredient is used as a pH control agent as defined in §170.3(o)(23) of this chapter and processing aid as defined in §170.3(o)(24) of this chapter.

(d) The ingredient is used in food at levels not to exceed good manufacturing practice in accordance with §184.1(b)(1). Current good manufacturing practice results in a maximum level, as served, of 0.014 percent for alcoholic beverages as defined in §170.3(n)(2) of this chapter and 0.0003 percent for cheeses as defined in §170.3(n)(5) of this chapter.

(e) Prior sanctions for this ingredient different from the uses established in this section do not exist or have been waived.


§ 184.1097 Tannic acid.

(a) Tannic acid (CAS Reg. No. 1401–55–4), or hydrolyzable gallotannin, is a complex polyphenolic organic structure that yields gallic acid and either glucose or quinic acid as hydrolysis products. It is a yellowish-white to light brown substance in the form of an
amorphous, bulky powder, glistening scales, or spongy masses. It is also odorless, or has a faint characteristic odor, and has an astringent taste. Tannic acid is obtained by solvent extraction of nutgalls or excrescences that form on the young twigs of Quercus infectoria Oliver and related species of Quercus. Tannic acid is also obtained by solvent extraction of the seed pods of Tara (Caesalpinia spinosa) or the nutgalls of various sumac species, including Rhus semialata, R. coriaria, R. galabra, and R. typhia.

(b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 319, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(c)(1) In accordance with §184.1(b)(2), the ingredient is used in food only within the following specific limitations:

<table>
<thead>
<tr>
<th>Category of food</th>
<th>Maximum level of use in food as served (percent)</th>
<th>Functional use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baked goods and baking mixes, §170.3(n)(1) of this chapter.</td>
<td>0.01</td>
<td>Flavoring agent and adjuvant, §170.3(o)(12) of this chapter.</td>
</tr>
<tr>
<td>Alcoholic beverages, §170.3(n)(2) of this chapter.</td>
<td>0.005</td>
<td>Flavor enhancer, §170.3(o)(11) of this chapter; flavoring agent and adjuvant, §170.3(o)(12) of this chapter; processing aid, §170.3(o)(24) of this chapter.</td>
</tr>
<tr>
<td>Nonalcoholic beverages and beverage bases, §170.3(n)(3) of this chapter and for gelatins, puddings, and fillings, §170.3(n)(22) of this chapter.</td>
<td>0.04</td>
<td>Flavoring agent and adjuvant, §170.3(o)(12) of this chapter; pH control agent, §170.3(o)(23) of this chapter.</td>
</tr>
<tr>
<td>Frozen dairy desserts and mixes, §170.3(n)(25) of this chapter.</td>
<td>0.013</td>
<td>Do.</td>
</tr>
<tr>
<td>Hard candy and cough drops, §170.3(n)(25) of this chapter.</td>
<td>0.001</td>
<td>Do.</td>
</tr>
<tr>
<td>Meat products, §170.3(n)(29) of this chapter.</td>
<td>0.001</td>
<td>Do.</td>
</tr>
</tbody>
</table>

(2) Tannic acid may be used in rendered animal fat in accordance with 9 CFR 318.7.

(d) Prior sanctions for this ingredient different from the uses established in this section do not exist or have been waived.

[50 FR 21043, May 22, 1985]

§ 184.1099 Tartaric acid.

(a) Food grade tartaric acid (C_4H_6O_6, CAS Reg. No. 87-69-4) has the L configuration. The L form of tartaric acid is dextrorotatory in solution and is also known as L(+)-tartaric acid. Tartaric acid occurs as colorless or translucent crystals or as a white, crystalline powder. It is odorless and has an acid taste. It is obtained as a byproduct of wine manufacture.

(b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), P. 320, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(c) In accordance with §184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use: