Petroleum wax shall contain not more than 1,050 parts per million of poly(alkylacrylate) or poly(alkylmethacrylate) residues as determined by a method entitled “Method for Determining Residual Level of Poly(alkylacrylate) in Petroleum Wax,” which is incorporated by reference. Copies are available from the addresses cited in this paragraph.

(d) Petroleum wax is used or intended for use as follows:

<table>
<thead>
<tr>
<th>Use Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>In chewing gum base, as a masticatory substance.</td>
</tr>
<tr>
<td>In an amount not to exceed good manufacturing practice.</td>
</tr>
<tr>
<td>On cheese and raw fruits and vegetables as a protective coating.</td>
</tr>
<tr>
<td>As a defoamer in food.</td>
</tr>
<tr>
<td>As a component of microcapsules for spice-flavoring substances.</td>
</tr>
</tbody>
</table>

[42 FR 14491, Mar. 15, 1977, as amended at 59 FR 10986, Mar. 9, 1994]

§ 172.890 Rice bran wax.

Rice bran wax may be safely used in food in accordance with the following conditions:

(a) It is the refined wax obtained from rice bran and meets the following specifications:
- Melting point 75 °C to 80 °C.
- Free fatty acids, maximum 10 percent.
- Iodine number, maximum 20.
- Saponification number 75 to 120.

(b) It is used or intended for use as follows:

<table>
<thead>
<tr>
<th>Food</th>
<th>Limitation in food</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candy</td>
<td>56 p.p.m</td>
<td>Coating.</td>
</tr>
<tr>
<td>Fresh fruits and fresh vegetables</td>
<td>Do</td>
<td>Do.</td>
</tr>
<tr>
<td>Chewing gum</td>
<td>2½ pct</td>
<td>Plasticizing material.</td>
</tr>
</tbody>
</table>

[42 FR 14491, Mar. 15, 1977, as amended at 59 FR 10986, Mar. 9, 1994]

§ 172.892 Food starch-modified.

Food starch-modified as described in this section may be safely used in food. The quantity of any substance employed to effect such modification shall not exceed the amount reasonably required to accomplish the intended physical or technical effect, nor exceed any limitation prescribed. To insure safe use of the food starch-modified, the label of the food additive container shall bear the name of the additive “food starch-modified” in addition to other information required by the Act. Food starch may be modified by treatment prescribed as follows:

<table>
<thead>
<tr>
<th>Use</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>In chewing gum base, as a masticatory substance.</td>
<td></td>
</tr>
<tr>
<td>In an amount not to exceed good manufacturing practice.</td>
<td></td>
</tr>
<tr>
<td>On cheese and raw fruits and vegetables as a protective coating.</td>
<td></td>
</tr>
<tr>
<td>As a defoamer in food.</td>
<td></td>
</tr>
<tr>
<td>As a component of microcapsules for spice-flavoring substances.</td>
<td></td>
</tr>
</tbody>
</table>

[42 FR 14491, Mar. 15, 1977, as amended at 59 FR 10986, Mar. 9, 1994]
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§ 172.892

(a) Food starch may be acid-modified by treatment with hydrochloric acid or sulfuric acid or both.

(b) Food starch may be bleached by treatment with one or more of the following:

1. Active oxygen obtained from hydrogen peroxide and/or per-acetic acid, not to exceed 0.45 percent of active oxygen. Ammonium persulfate, not to exceed 0.075 percent and sulfur dioxide, not to exceed 0.05 percent.

2. Chlorine, as calcium hypochlorite, not to exceed 0.036 percent of dry starch.

3. Chlorine, as sodium hypochlorite, not to exceed 0.0082 pound of chlorine per pound of dry starch.

4. Potassium permanganate, not to exceed 0.2 percent.

5. Residual manganese (calculated as Mn), not to exceed 50 parts per million in food starch-modified.

(c) Food starch may be oxidized by treatment with chlorine, as sodium hypochlorite, not to exceed 0.055 pound of chlorine per pound of dry starch.

(d) Food starch may be esterified by treatment with one of the following:

1. Acetic anhydride

2. Adipic anhydride, not to exceed 0.12 percent, and acetic anhydride.

3. Monosodium orthophosphate

4. Phosphorus oxychloride, not to exceed 0.1 percent, followed by either acetic anhydride, not to exceed 2.5 percent, or vinyl acetate, not to exceed 7.5 percent, or acetyl groups in food starch-modified not to exceed 2.5 percent.

5. Sodium trimetaphosphate

(e) Food starch may be etherified by treatment with one of the following:

1. Acrolein, not to exceed 0.6 percent.

2. Epichlorohydrin, not to exceed 0.3 percent.

3. Epichlorohydrin, not to exceed 0.1 percent, and propylene oxide, not to exceed 10 percent, added in combination or in any sequence.

4. Epichlorohydrin, not to exceed 0.1 percent, followed by propylene oxide, not to exceed 25 percent.

5. Propylene oxide, not to exceed 25 percent.

(f) Food starch may be esterified and etherified by treatment with one of the following:

1. Acrolein, not to exceed 0.6 percent and vinyl acetate, not to exceed 7.5 percent.

2. Epichlorohydrin, not to exceed 0.3 percent, and acetic anhydride.

3. Epichlorohydrin, not to exceed 0.3 percent, and succinic anhydride, not to exceed 4 percent.

4. Phosphorus oxychloride, not to exceed 0.1 percent, and propylene oxide, not to exceed 10 percent.

(g) Food starch may be modified by treatment with one of the following:
(h) Food starch may be modified by a combination of the treatments prescribed by paragraphs (a), (b), and/or (i) of this section and any one of the treatments prescribed by paragraph (c), (d), (e), (f), or (g) of this section, subject to any limitations prescribed by the paragraphs named.

(i) Food starch may be modified by treatment with the following enzymes:

<table>
<thead>
<tr>
<th>Enzyme</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha-amylase (E.C. 3.2.1.1)</td>
<td>The enzyme must be generally recognized as safe or approved as a food additive for this purpose. The resulting nonseeds nutritive saccharide polymer has a dextrose equivalent of less than 20.</td>
</tr>
<tr>
<td>Beta-amylase (E.C. 3.2.1.2)</td>
<td></td>
</tr>
<tr>
<td>Glucoamylase (E.C. 3.2.1.3)</td>
<td></td>
</tr>
<tr>
<td>Isocamilase (E.C. 3.2.1.68)</td>
<td></td>
</tr>
<tr>
<td>Pullulanase (E.C. 3.2.1.41)</td>
<td></td>
</tr>
</tbody>
</table>

§ 172.894 Modified cottonseed products intended for human consumption.

The food additive modified cottonseed products may be used for human consumption in accordance with the following prescribed conditions:

(a) The additive is derived from:

(1) Decorticated, partially defatted, cooked, ground cottonseed kernels; or

(2) Decorticated, ground cottonseed kernels, in a process that utilizes n-hexane as an extracting solvent in such a way that no more than 60 parts per million of n-hexane residues and less than 1 percent fat by weight remain in the finished product; or

(3) Glandless cottonseed kernels roasted to attain a temperature of not less than 250 °F in the kernel for not less than 5 minutes for use as a snack food, or in baked goods, or in soft candy; or

(4) Raw glandless cottonseed kernels may be used in hard candy where the kernel temperature during cooking will exceed 225 °F for not less than 5 minutes.

(b) The additive is prepared to meet the following specifications:

(1) Free gossypol content not to exceed 450 parts per million.

(2) It contains no added arsenic compound and therefore may not exceed a maximum natural background level of 0.2 part per million total arsenic, calculated as As.

(c) To assure safe use of the additive, the label of the food additive container shall bear, in addition to other information required by the act, the name of the additive as follows:

(1) The additive identified in paragraph (a)(1) of this section as “partially defatted, cooked cottonseed flour”.

(2) The additive identified in paragraph (a)(2) of this section as “defatted cottonseed flour”.

(3) The additive identified in paragraph (a)(3) of this section as “roasted glandless cottonseed kernels”.

(4) The additive identified in paragraph (a)(4) of this section as “raw glandless cottonseed kernels for use in cooked hard candy”.

(d) The Food and Drug Administration and the Environmental Protection Agency have determined that glandless cottonseed kernels permitted for use by this section are a distinct commodity from glanded cottonseed.

§ 172.896 Dried yeasts.

Dried yeast (Saccharomyces cerevisiae and Saccharomyces fragilis) and dried torula yeast (Candida utilis) may be safely used in food provided the total folic acid content of the yeast does not exceed 0.04 milligram per gram of yeast (approximately 0.008 milligram of pteroylglutamic acid per gram of yeast).

§ 172.898 Bakers yeast glycan.

Bakers yeast glycan may be safely used in food in accordance with the following conditions:

(a) Bakers yeast glycan is the comminuted, washed, pasteurized, and