§ 172.590 Yeast-malt sprout extract.

Yeast-malt sprout extract, as described in this section, may be safely used in food in accordance with the following prescribed conditions:

(a) The additive is produced by partial hydrolysis of yeast extract (derived from *Saccharomyces cerevisiae*, *Saccharomyces fragilis*, or *Candida utilis*) using the sprout portion of malt barley as the source of enzymes. The additive contains a maximum of 6 percent 5′ nucleotides by weight.

(b) The additive may be used as a flavor enhancer in food at a level not in excess of that reasonably required to produce the intended effect.

§ 172.610 Arabinogalactan.

Arabinogalactan may be safely used in food in accordance with the following conditions:

(a) Arabinogalactan is a polysaccharide extracted by water from Western larch wood, having galactose units and arabinose units in the approximate ratio of six to one.

(b) It is used in the following foods in the minimum quantity required to produce its intended effect as an emulsifier, stabilizer, binder, or bodying agent: Essential oils, nonnutritive sweeteners, flavor bases, nonstandardized dressings, and pudding mixes.

§ 172.615 Chewing gum base.

The food additive chewing gum base may be safely used in the manufacture of chewing gum in accordance with the following prescribed conditions:

(a) The food additive consists of one or more of the following substances that meet the specifications and limitations prescribed in this paragraph, used in amounts not to exceed those required to produce the intended physical or other technical effect.
### Masticatory Substances—Continued

#### Natural (Coagulated or Concentrated Latices) of Vegetable Origin

<table>
<thead>
<tr>
<th>Synthetic</th>
<th>Genus and species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butadiene-styrene rubber</td>
<td>Basic polymer. Do.</td>
</tr>
<tr>
<td>Isobutylene-isoprene copolymer (butyl rubber)</td>
<td>Synthesized by Fischer-Tropsch process from carbon monoxide and hydrogen which are catalytically converted to a mixture of paraffin hydrocarbons. Lower molecular weight fractions are removed by distillation. The residue is hydrogenated and further treated by percolation through activated charcoal. The product has a congealing point of 93°–99°C as determined by ASTM method D368–71 (Reapproved 1981). “Standard Test Method for Congealing Point of Petroleum Waxes, Including Petroleum,” a maximum oil content of 0.5 percent as determined by ASTM method D721–56T, “Tentative Method of Test for Oil Content of Petroleum Waxes,” and an absorptivity of less than 0.01 at 290 millimicrons in decachloronaphthalene at 88°C as determined by ASTM method D2008–80, “Standard Test Method for Ultraviolet Absorbance and Absorptivity of Petroleum Products,” which are incorporated by reference. Copies may be obtained from the American Society for Testing Materials, 100 Barr Harbor Dr., West Conshohocken, Philadelphia, PA 19428-2959, 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: <a href="http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html">http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html</a>.</td>
</tr>
<tr>
<td>Paraffin</td>
<td>Complying with §172.886.</td>
</tr>
<tr>
<td>Petroleum wax</td>
<td>Complying with §172.886.</td>
</tr>
<tr>
<td>Petroleum wax synthetic</td>
<td>Complying with §172.886.</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>Molecular weight 2,000–21,000.</td>
</tr>
<tr>
<td>Polyisobutylene</td>
<td>Minimum molecular weight 37,000 (Flory).</td>
</tr>
<tr>
<td>Polystyrene</td>
<td>Molecular weight, minimum 2,000.</td>
</tr>
<tr>
<td>Glycerol ester of partially dimerized gum or wood rosin</td>
<td>Having an acid number of 3–8, a minimum drop-softening point of 109°C, and a color of M or paler.</td>
</tr>
<tr>
<td>Glycerol ester of partially hydrogenated gum or wood rosin</td>
<td>Having an acid number of 3–10, a minimum drop-softening point of 79°C, and a color of N or paler.</td>
</tr>
<tr>
<td>Glycerol ester of polymerized rosin</td>
<td>Having an acid number of 3–12, a minimum melting-point of 80°C, and a color of M or paler.</td>
</tr>
<tr>
<td>Glycerol ester of gum rosin</td>
<td>Having an acid number of 5–9, a minimum drop-softening point of 88°C, and a color of N or paler. The ester is purified by steam stripping.</td>
</tr>
<tr>
<td>Glycerol ester of tall oil rosin</td>
<td>Having an acid number of 2–12, a softening point (ring and ball) of 80°–88°C, and a color of N or paler. The ester is purified by steam stripping.</td>
</tr>
<tr>
<td>Glycerol ester of wood rosin</td>
<td>Having an acid number of 3–8, a drop-softening point of 88°C–96°C, and a color of N or paler. The ester is purified by steam stripping.</td>
</tr>
<tr>
<td>Lanolin</td>
<td>Having an acid number of 4–8, a refractive index of 1.5170–1.5205 at 20°C, and a viscosity of 23–66 poises at 25°C. The ester is purified by steam stripping.</td>
</tr>
<tr>
<td>Methyl ester of rosin, partially hydrogenated</td>
<td>Having an acid number of 7–18, a minimum drop-softening point of 102°C, and a color of K or paler.</td>
</tr>
<tr>
<td>Pentaerythritol ester of partially hydrogenated gum or wood rosin</td>
<td>Having an acid number of 7–18, a minimum drop-softening point of 102°C, and a color of K or paler.</td>
</tr>
<tr>
<td>Pentaerythritol ester of gum or wood rosin</td>
<td>Having an acid number of 6–16, a minimum drop-softening point of 109°C, and a color of M or paler.</td>
</tr>
<tr>
<td>Rice bran wax</td>
<td>Complying with §172.890.</td>
</tr>
<tr>
<td>Stearic acid</td>
<td>Complying with §172.860.</td>
</tr>
<tr>
<td>Sodium and potassium stearates</td>
<td>Complying with §172.863.</td>
</tr>
<tr>
<td>Butylated hydroxyanisole</td>
<td>Not to exceed antioxidant content of 0.1% when used alone or in any combination. Do.</td>
</tr>
<tr>
<td>Butylated hydroxytoluene</td>
<td>Do.</td>
</tr>
</tbody>
</table>

#### Terpene Resins

<table>
<thead>
<tr>
<th>Synthetic</th>
<th>Genus and species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic resin</td>
<td>Consisting of polymers of opine, lpinene, and/or dipentene; acid value less than 5, saponification number less than 5, and color less than 4 on the Gardner scale as measured in 50 percent mineral spirit solution.</td>
</tr>
</tbody>
</table>

#### Antioxidants

Butylated hydroxyanisole

Butylated hydroxytoluene

Do.
§ 172.620  Carrageenan.

The food additive carrageenan may be safely used in food in accordance with the following prescribed conditions:

(a) The food additive is the refined hydrocolloid prepared by aqueous extraction from the following members of the families Gigartinaceae and Solieriaceae of the class Rodophyceae (red seaweed):

- Chondrus crispus.
- Chondrus ocellatus.
- Eucheuma cottonii.
- Eucheuma spinosum.
- Gigartina acicularis.
- Gigartina pistillata.
- Gigartina radula.
- Gigartina stellata.

(b) The food additive conforms to the following conditions:

(1) It is a sulfated polysaccharide the dominant hexose units of which are galactose and anhydrogalactose.

(2) Range of sulfate content: 20 percent to 40 percent on a dry-weight basis.

(c) The food additive is used or intended for use in the amount necessary for an emulsifier, stabilizer, or thickener in foods, except for those standardized foods that do not provide for such use.

(d) To assure safe use of the additive, the label and labeling of the additive shall bear the name of the additive, carrageenan.

§ 172.623  Carrageenan with polysorbate 80.

Carrageenan otherwise meeting the definition and specifications of § 172.620 (a) and (b) and salts of carrageenan otherwise meeting the definition of § 172.626(a) may be safely produced with the use of polysorbate 80 meeting the specifications and requirements of § 172.840 (a) and (b) in accordance with the following prescribed conditions:

(a) The polysorbate 80 is used only to facilitate separation of sheeted carrageenan and salts of carrageenan from drying rolls.

(b) The carrageenan and salts of carrageenan contain not more than 5 percent by weight of polysorbate 80, and the final food containing the additives contains polysorbate 80 in an amount not to exceed 500 parts per million.

(c) The carrageenan and salts of carrageenan so produced are used only in producing foods in gel form and only for the purposes defined in §§ 172.620(c) and 172.626(b), respectively.

(d) The carrageenan and salts of carrageenan so produced are not used in foods for which standards of identity exist unless the standards provide for the use of carrageenan, or salts of carrageenan, combined with polysorbate 80.