Mineral reinforced nylon resins identified in paragraph (a) of this section may be safely used as articles or components of articles intended for repeated use in contact with nonacidic food (pH above 5.0) and at use temperatures not exceeding 212 °F, in accordance with the following prescribed conditions:

(a) For the purpose of this section the mineral reinforced nylon resins consist of nylon 66, as identified in and complying with the specifications of §177.1500, reinforced with up to 40 weight percent of calcium silicate and up to 0.5 weight percent 3-(triethoxysilyl) propylamine (Chemical Abstracts Service Registry No. 000919302) based on the weight of the calcium silicate.

(b) The mineral reinforced nylon resins may contain up to 0.2 percent by weight of titanium dioxide as an optional adjuvant substance.

(c) The mineral reinforced nylon resins with or without the optional substance described in paragraph (b) of this section, when extracted with the solvents, i.e., distilled water and 50 percent (by volume) ethyl alcohol in distilled water, at reflux temperature for 24 hours using a volume-to-surface ratio of 2 milliliters of solvent per square inch of surface tested, shall meet the following extractives limitations:

(1) Total extractives not to exceed 5.0 milligrams per square inch of food-contact surface tested for each solvent.

(2) The ash after ignition of the extractives described in paragraph (c)(1) of this section, not to exceed 0.5 milligram per square inch of food-contact surface tested.

(d) In accordance with good manufacturing practice, finished articles containing the mineral reinforced nylon resins shall be thoroughly cleansed prior to their first use in contact with food.

Perfluorocarbon cured elastomers identified in paragraph (a) of this section may be safely used as articles or components of articles intended for repeated use in contact with nonacid food (pH above 5.0), subject to the provisions of this section.

(a) **Identity.** (1) For the purpose of this section, perfluorocarbon cured elastomers are produced by terpolymerizing tetrafluoroethylene (CAS Reg. No. 116–14–3), perfluoromethyl vinyl ether (CAS Reg. No. 1187–93–5), and perfluoro-2-phenoxypropyl vinyl ether (CAS Reg. No. 24520–19–2) and subsequent curing of the terpolymer (CAS Reg. No. 26658–70–8) using the crosslinking agent, phenol, 4,4′-[2,2,2-trifluoro-1-(trifluoromethyl) ethylidene] bis-,dipotassium salt (CAS Reg. No. 25088–69–1) and accelerator, 1,4,7,10,13,16-hexaoxacyclooctadecane (CAS Reg. No. 17455–13–9).

(2) The perfluorocarbon base polymer shall contain no less than 40 weight-percent of polymer units derived from tetrafluoroethylene, no less than 40 weight-percent of polymer units derived from perfluoromethyl vinyl ether and no more than 5 weight-percent polymer units derived from perfluoro-2-phenoxy-propyl vinyl ether.

(3) The composition limitations of the cured elastomer, calculated as parts per 100 parts of terpolymer, are as follows:

Phenol, 4,4′-[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene] bis-,dipotassium salt—not to exceed 5 parts.

1,4,7,10,13,16-Hexaoxacyclooctadecane—not to exceed 5 parts.

(b) **Optional adjuvant substances.** The perfluorocarbon cured elastomer identified in paragraph (a) of this section may contain the following optional adjuvant substances, subject to any limitations cited on their use:

(1) Substances generally recognized as safe (GRAS) in food or food packaging:

(2) Substances used in accordance with a prior sanction.

(3) Substances authorized under applicable regulations in this part and in parts 175 and 178 of this chapter and
§ 177.2410 Phenolic resins in molded articles.

Phenolic resins identified in this section may be safely used as the food-contact surface of molded articles intended for repeated use in contact with nonacid food (pH above 5.0), in accordance with the following prescribed conditions:

(a) For the purpose of this section, the phenolic resins are those produced when one or more of the phenols listed in paragraph (a)(1) of this section are made to react with one or more of the aldehydes listed in paragraph (a)(2) of this section, with or without aniline and/or anhydro-formaldehyde aniline (hexahydro-1,3,5-triphenyl-s-triazine):

(1) Phenols:
   - p-tert-Amylphenol.
   - p-tert-Butylphenol.
   - o-, m-, and p-Cresol.
   - p-Octylphenol.
   - Phenol.
   - o- and p-Phenylethylphenol mixture produced when phenol is made to react with styrene in the presence of sulfuric acid catalyst.

(2) Aldehydes:
   - Acetaldehyde.
   - Formaldehyde.
   - Paraldehyde.

(b) Optional adjuvant substances employed in the production of the phenolic resins or added thereto to impart desired technical or physical properties include the following:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos fiber</td>
<td>For use as catalyst.</td>
</tr>
<tr>
<td>Barium hydroxide</td>
<td>For use as lubricant.</td>
</tr>
<tr>
<td>Calcium stearate</td>
<td></td>
</tr>
<tr>
<td>Carbon black (channel process)</td>
<td></td>
</tr>
<tr>
<td>Diatomaceous earth</td>
<td></td>
</tr>
<tr>
<td>Glass fiber</td>
<td></td>
</tr>
<tr>
<td>Hexamethylenetraminie</td>
<td>For use as curing agent.</td>
</tr>
<tr>
<td>Mica</td>
<td>For use as catalyst.</td>
</tr>
<tr>
<td>Oxalic acid</td>
<td></td>
</tr>
</tbody>
</table>

(2) Fluoride extractives calculated as fluorine not to exceed 0.47 milligram per square decimeter (0.03 milligram per square inch).

(e) Conditions of use. In accordance with current good manufacturing practice, finished food contact articles containing the perfluorocarbon cured elastomers shall be thoroughly cleaned prior to their first use in contact with food.

[49 FR 43050, Oct. 26, 1984]