Unofficial Translation

**Ordinance on Tobacco Products**
*(Tobacco Ordinance)*

TabV 1977

Date of original text: 12/20/1977

Full citation:

"Tobacco Ordinance of December 20, 1977 (Bundesgesetzblatt, BGBl. [Federal Law Gazette] I p. 2831), which was last amended by Article 1 of the Ordinance of December 22, 2014 (BGBl. I p. 2398)"

**Status:** Last amended by Art. 1 V. 12/22/2014 I 2398

**Footnote**

(+++Text citation validity as of: 7/19/1984+++)

(+++Stipulations based on EinigVtr no longer to be applied in accordance with Art. 4(d)(G) of 12/08/2010 I 1864 mWv 2/16/2010 ++++

**Preamble**

In accordance with Articles 9(1)(v), 20(3), 21(1)(i)(a) and 21(2), in conjunction with Articles 19(4)(b) and 22(2)(ii) of the Food and Consumer Goods Law of 15 August 1974, the Federal Ministries of Food, Agriculture and Forestry and of Commerce, with the approval of the Federal Parliament, order that:

**Article 1**

(1) For the commercial manufacture of tobacco products, substances listed in Annex 1 will be permitted for the usages listed there. The approval of the substances listed in Annex 1 Part B Column b is valid until the end of the day specified in Annex 1 Part B Column b.

(2) The amount of permitted substances in tobacco products may not exceed the maximum limits expressed in Annex 1.

(3) Permitted substances must meet the purity requirements listed in Annex 1, as well as the general and substance-specific purity requirements of the Food Additive Commerce Regulation of January 29, 1998 (BGBl. I p. 230, 269), which was last amended by Article 2 of the provision of March 28, 2011 (BGBl, p. 530).

**Article 2**

(1) Olfactory and gustatory substances which are listed in Annex 2(1) or are extracted from plants or plant components listed in Annex 2(2) may not be used for the manufacture of tobacco products.

(2) As an exception to paragraph 1 above, camphor may be used in the manufacture of snuff to a maximum permitted content of 2 grams per 100 grams of the product.

(3) The permitted usage of decoumarinized tonka beans for snuff [Annex 1(14)(b)] remains unaltered.

**Article 3**

(1) Flavorings containing extraction solvents listed in Annex 1(1)(ii) must contain the warning "For the manufacture of tobacco products only".

(2) For chewing tobacco, black twisted tobacco and snuff which contain substances listed in Annex 1(9), the content of these substances must be revealed through the phrase "contains preservatives".

(3) For chewing tobacco and black twisted tobacco containing substances listed in Annex 1(10)(d), as well as for snuff containing substances listed in Annex 1(10)(e), the content of these substances must be made known through the phrase "contains dyes".
(4) For chewing tobacco containing saccharin, the content of this substance must be made known through the phrase "contains the sweetener saccharin".
(5) For cigars containing substances listed in Annex 1(10)(a), the content of these substances must be made known through the phrase "dyed".
(6) The phrases required in paragraphs 1 to 5 must be placed on the packs, cartons or other containers in a clearly visible format with easily readable characters.
(7) With the exception of the cases defined in paragraphs 1 to 5, no further labeling is required for substances permitted in Article 1.

Article 3a

(1) The maximum quantities specified in Annex 3 for the substances listed there may not be exceeded in or on tobacco products when they are put on the market.
(2) In deviation of Article 14(1)(ii) of the Preliminary Tobacco Act, tobacco products may be marketed if illegal pesticides, for which no maximum limits have been defined in accordance with paragraph 1, are present in or on them, as long as the quantity of pesticides present is not likely to be detrimental to human health.
(3) For the official control of residues of pesticides, analytical methods listed in the Official Collection of Analytical Methods according to Article 64(1) of the German food and feed code*) must be used. Other analytical methods not listed in the Official Collection of Analytical Methods may also be used if they are equivalent to these analytical methods. Equivalence of analytical methods can be determined using the Annex of the EU Council Directive 85/591/EEC of 20 December 1985 concerning the Introduction of Community Methods of Sampling and Analysis for the Monitoring of Foodstuffs (Abl. EC No. L 372 p. 50). If no analytical methods are listed in the Official Collection for certain substances, other analytical methods can also be used. In these cases, these methods must comply to the extent possible to the requirements in the Directive 85/591/EEC.

*) can be obtained from Beuth-Verlag GmbH, Berlin and Cologne.

Article 4

In deviation from Article 22(2)(ii) of the Preliminary Tobacco Act, cigars will be permitted to contain the phrase "natural color" or similar labeling referring to the natural color of the wrappers, as long as they are not dyed or colored, and also have not undergone any other sort of surface treatment.

Article 5

The following may not be brought into commerce:
1. Cigars containing tobacco leaves as filler which have a tobacco content of less than 75 percent on a dry matter basis,
2. Cigars in which the percentage of tobacco leaves is greater than 25 percent of the product, less the weight of the tip; for cigars with artificial wrappers, this maximum amount is reduced by the weight of the artificial wrapper,
3. Smoking tobacco and cigarettes containing tobacco leaves with a tobacco content of less than 75 percent on a dry matter basis,
4. Smoking tobacco and cigarettes in which the percentage of tobacco leaves is greater than 25 percent of the tobacco mixture,
5. Tobacco products which are chemically bleached,
6. Dyed cigarette tobacco,
7. Dyed smoking tobacco, with the exception of black twisted tobacco,
8. Cigars with an artificial wrapper or tobacco-leaf wrapper, unless their packaging clearly labels them "with artificial wrapper". If the percentage of tobacco in the wrapper exceeds 50% by weight, then the package may be labeled "with artificial wrapper containing tobacco". No indication is necessary for
cigars with wrappers made of tobacco, as long as the percentage by weight of the tobacco in the wrapper is at least 75%.

**Article 5a**
It is prohibited to market tobacco products intended for oral uses other than smoking or chewing.

**Article 6**
(1) In accordance with Article 52(2)(i) of the Preliminary Tobacco Act, every person shall be punished who:
1. in the commercial manufacture of tobacco products intended to be brought into commerce,
a) uses substances listed in Annex 1 in excess of the maximum limits permitted in Article 1(2), or in violation of the purity requirements set forth in Article 1(3), or 
b) uses prohibited olfactory and gustatory substances in violation of Article 2(1),
2. brings into commerce tobacco products in which the substance content is not made known, or not made known in the manner required under Article 3(2) - (5) or (6),
3. brings into commerce tobacco products in violation of the prohibitions found in Article 5 or 5a.
(2) Anyone whose negligence causes a violation of paragraphs 1-2 will have committed a civil infraction according to Article 53(1) of the Preliminary Tobacco Act.

**Article 7**
The ordinance also applies in Berlin according to Article 14 of the Third Transitional Act in conjunction with Article 11 of the Act on the Overall Reform of the Food Code of 15 August 1974 (BGBl. I p. 1945).

**Article 8**
(1) This Ordinance enters into force on 1 January 1978.
(2) Tobacco products that comply with the provisions of this ordinance in the version valid on 18 December 2003, may continue to be manufactured until 18 June 2004 and until existing stocks run out.

**End**

The Federal Minister for Youth, Families and Health

**Annex 1 to Article 1**

Source: BGBl. I 1977, 2833-2837; For the individual changes see footnote

Part A
Authorized substances
1. The following substances are approved for use as additives in the manufacture of tobacco products:
   - Flavorings meeting the requirements of the Flavoring Ordinance as amended and published on May 2, 2006 (BGBl. I p. 1127), amended by Article 4 of the Ordinance of September 27, 2007 (BGBl. I p. 2308, 2465)
   - Fruits, dried fruits, fruit pulps, fruit juice
   - Concentrated fruit juice and fruit syrup
   - Spices, provided they are not the plants or plant components listed in Annex 2 no. 2
   - Licorice
   - Coffee
Tea and similar products
Cocoa and cocoa products
Spirits (beverages)
Wine and liqueurs
Honey
Maple syrup
Types of sugar as defined in the Ordinance on Sugar Types and other types of sugar fit for human consumption, including caramelized sugars
Dextrins
Molasses
Starch
Starch treated with acid, thin-boiling starch
Starch degraded by oxidation
Starch phosphate
Abovementioned starches, also as gelatinized starch
Sodium chloride (NaCl)
Drinking water

Extracts containing the following solvents may be used for the manufacture of cigarettes, cigars, smoking tobacco and snuff:
1,3 butylene glycol (1,3-butanediol)
   (purity requirements: boiling rate at 1013 millibar (760 torr) 207-209° Celsius, refractive index n20 = 1.440 ± 0.0005,
   Bromine number according to Klein max. 0.1, content of reduced substances such as glycerin according to the pharmacopoeia

2. Humectants:
   a) For smoking tobacco, cigars, cigarettes, reconstituted tobacco and artificial wrapper:
      Glycerol (E 422)
      Hydrogenated glycose syrup
      (Purity requirements: clear, colorless syrupy solutions containing hydrogenated saccharides fit for human consumption that are obtained from glycose syrup; minimum content of D-sorbitol: 5% of the dry weight of the product)
   1,3-Butylene glycol (1,3-butanediol)
      (Purity requirements: see number 1) 1,2-Propylene glycol
   Triethylene glycol
      (Purity requirements: Purity requirements: specific gravity 20/20° Celsius 1, 124-1, 126 boiling range at 1013 millibar [760 torr] 280 - 290° Celsius, refractive index n20 = 1.4550 - 1.4560, ash content less than 0.01% by weight, monoethylene glycol content less than 0.1% by weight)
   Ortophosphoric acid (E 338)
   Glycerophosphoric acid and its sodium, potassium and magnesium compounds up to a maximum quantity of 5% of the dry weight of the product
   b) For chewing tobacco:
      Glycerol (E 422) up to 10% of the dry weight of the product
      Hydrogenated glycose syrup
      (Purity requirements: see a))
   c) For snuff:
      Hydrogenated glycose syrup
      (Purity requirements: see a))
Liquid paraffin up to a maximum amount of 25% of the dry weight of the product
Glycerol (E 422) up to 10% of the dry weight of the product
1,2-Propylene glycol
1,3-Butylene glycol (1,3-butanediol)
(Purity requirements: see No. 1)

3. Agglutinants, adhesives and thickeners:
   a) For cigars, cord like tobacco including black tobacco rolls, reconstituted tobacco and
      artificial wrappers as well as adhesives for side seams, filter wrappers, tips and filter (tipping)
      papers for cigarettes:
         Gelatins
         Shellac
         Collodion
         Cellulose acetate
         Ethylcellulose (E 462), also hydroxyethylated Methylcellulose (E 461), also hydroxyethylated
         or carboxymethylated Carboxymethylcellulose and its sodium (E466), potassium, calcium and
         magnesium compounds, also methylated Carboxymethyl starch with a degree of etherification
         up to 0.5
dialdehyde starch, produced from oxidized corn starch with aldehyde content of at least 90%
Gum arabic (E 414)
Agar-agar (E 406)
Alginic acid (E 400)
Sodium alginate (E 401)
Potassium alginate (E 402)
Calcium alginate (E 404)
Tragacanth (E 413)
Carob seed powder (E 410)
Guar seed powder (E 412)
   aa) Mixtures of aqueous dispersion of polyvinyl acetate, also partially hydrolyzed, or of
       copolymers of vinyl acetate with vinyl esters of saturated, aliphatic carboxylic acids of
       chain lengths up to C18 or with ethylene; and
   bb) Mixtures of aqueous solutions of polyvinyl alcohol; glycerol acetates may be added to
       these mixtures
   b) For reconstituted tobacco: Glyoxal up to a maximum amount of 2% of the dry weight of the
      product; or Melamine formaldehyde resin up to a maximum amount of 2% of the dry weight of
      the product
   c) For smoking tobacco: Agar-agar (E 406)
Gum arabic (E 414)
   d) For chewing tobacco: Gum arabic (E 414) up to a maximum amount of 25% of the dry
      weight of the product

4. Combustion modifying agents:
   Aluminum hydroxide
   Aluminum sulfate
   Aluminum oxide
   Magnesium oxide
   Talcum
   Titanium dioxide (E 171)
   Sodium, potassium, calcium and magnesium salts of carbonic, formic, acetic, malic, citric,
   tartaric, lactic and nitric acid

5. Substances for artificial wrappers and cigarette paper:
   Cellulose with a content of substances described in number 3a and 4.

6. Substances for filters of cigarettes, cigarette tips, cigars,
cigar tips and tobacco pipes:
   Activated charcoal
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(Purity requirements: After two hours of extraction with optically void cyclohexane or benzene in a Soxhlet apparatus, there may be no increase in the fluorescence in the solvent) Aluminum oxide
Cellulose acetate
Glycerol acetates as binder for cellulose acetate
Silica gel
Magnesium silicate hydrate (meerschaum)
Polyethylene
Titanium dioxide (E 171) up to 2% of the filter weight
Triethylene glycol diacetate
(Purity requirements: specific gravity at 20/20° Celsius, 1.110 - 1.130, boiling range of principal fraction from 5 to 95 ml of a 100 ml sample at 1013 millibar [760 torr] 288-300° Celsius, at 67 millibar [50 torr] 195-205° Celsius, color only slightly yellowish, refractive index n₂₀ 1.438-1.439, viscosity, 9.5- 9.7 cps at 25° Celsius, content of triethylene glycol diacetate at least 97.0%, content of di-, tetra- and polyethylene glycol diacetates only 1.2%, monoethylene glycol content not exceeding 0.1%, acids (calculated as acetic acid) not more than 0.05%, water content not more than 0.2%, mineral content not more than 0.01%)
Mixtures of
a) aqueous dispersions of polyvinyl acetate, also partially hydrolyzed, or of copolymers of vinyl acetate with vinyl esters of long-chain saturated aliphatic carboxylic acids with chain lengths up to C₁₈ or with ethylene and
b) aqueous solutions of polyvinyl alcohols as adhesive for tip and plugwrap (tipping paper; glycerol acetates may be added to these mixtures)
Ethyl citrates in cigarette filters
(Purity requirements: clear, colorless, viscous solution, odorless, no acid content corresponding to 20.2 ± 0.6 ml 0.2 n KOH/g, heavy metals less than 10 ppm, arsenic less than 3 ppm)
7. Substances for filter wrappers, tips and plugwrap (tipping) paper:
Paper, cardboard, cellulose acetate
Cork and straw
(Purity requirements: no foreign components, particularly no Salmonellae)
Aluminum (E 173)
Aluminum foil, also with protective varnish
(Purity requirements: Depending on their composition, the coatings must be dried in such a way that no volatile components, especially solvents, can migrate to the tips. After application to a suitable substrate, upon extraction with distilled water at 40° Celsius for 10 days, 1 dm² of varnished surface may not release more than:
  a) 5.0 mg of soluble substances;
  b) 1.0 mg phenolic substances;
  c) 0.3 mg formaldehyde;
  d) 1.0 mg zinc ions;
  e) 1.0 mg organically bound nitrogen.
Aromatic amines must not be detectable.
8. Substances for hot-melt adhesives for filter wrappers, tips and plugwrap (tipping) paper:
a) Copolymers of ethylene and vinyl esters of saturated aliphatic monocarboxylic acids of a chain length of C₂⁻C₁₈
(Purity requirements: The melting index determined according to DIN 53735 may not exceed 500.)
b) Hydrogenated polycyclopentadiene resin
(Purity requirements: The viscosity at 140° C must be at least 2000 cps.)
c) Microcrystalline waxes
d) Paraffins of appendix 2 of the Additives Marketing Ordinance of January 29, 1998 (BGBl. I p. 230, 269), which was last amended by Article 2 of the ordinance of March 28, 2011 (BGBl. I p. 530)
e) Styrene copolymers and graft polymers of styrene, alpha-methylstyrene and vinyl toluene
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(Purity requirements: A film of 3 dm² and 10 g produced with these substances may not release more than 15mg/dm² of volatile organic substances within 24 hours when heated to 90° Celsius
f) Polyisobutylene
g) Glycerol and pentaerythrite esters of the resinous acid of rosin and its hydrogenated products
h) 2.6-Ditertiaray-butyl-4-methylphenol
   (Purity requirements: Not more than 0.5% of (2,6-di-tert-butyl-4-methylphenol) this substance may be added as an antioxidant for the production of hot-melt adhesives made of substances named in numbers 8a. to 8e.)

The substance names in 8a to 8g may only contain technically unavoidable residues of the monomeric starting materials and of the extractable inactive processing aids.

9. Preservatives, but not for cigars or cigarettes, with the exception of adhesives for cigarette seams and tobacco reconstituted:
   Sorbic acid (E 200), Sodium sorbate (E 201), Potassium sorbate (E 202) and calcium sorbate (E 203) up to 2 grams in one kilogram of the product relative to the dry weight
   Benzoic acid (E 210) and sodium benzoate (E 211) up to 5 grams in one kilogram of the product, calculated as benzoic acid, relative to the dry weight.
   Para-hydroxybenzoic acid ethyl ester (E 214), para-hydroxybenzoic acid Propyl ester (E 216) and their sodium compounds (E 215 and E 217) up to 5 grams in one kilogram of the product, calculated as benzoic acid relative to the dry weight.
   For reconstituted tobacco, also thiabendazol (E 233) up to 0.6 grams in one kilogram of the product, calculated as benzoic acid relative to the dry weight.
   Where preservatives are mixed, the maximum limit listed for each substance is reduced by the total percentage of the other preservatives contained in the mixture.

10. Dyes
    a) For cigarette paper and wrappers, reconstituted tobacco and artificial wrappers for cigars:
       Humic acid and its alkali salts
       (Purity requirements: These substances may not contain extractable polycyclic aromatic hydrocarbons with three or more nuclei.)
       Extracts of buckthorn berry, obtained from buckthorn berries (Rhamnus cartharticus) by extraction with water
       Extracts of logwood, obtained from the wood of Haematoxylon campechianum by extraction with water
       Extract of yellow wood, obtained from yellow wood (Morus tinctoria) by extraction with water
       Carbo medicinalis vegetabilis (E 153)
       Brilliant black BN (E 151)
       Ponceau 4R (E 124)
       True red E
       Yellow-orange S (E 110)
       Orange GGN (E 111)
       Indigo I (E 132)
       Amaranth (E 123)
       Tartrazine (E 102)
       as well as their respective aluminum, calcium and magnesium compounds (so-called varnishes)
    b) For filter wrappers, tips and filter (tipping) paper for cigars and cigarettes:
       Substances listed in No. 10a. as well as: Gold foil (E 175)
       Shell gold (copper-zinc alloy with a maximum zinc content of 15%)
       Silver foil (Aluminum E 173)
       Calcium carbonate
       Calcium sulfate
Titanium dioxide (E 171), also mixed with mica, which may not amount to more than 75%, and the pigment mixture must be surrounded by a coating binder.
Iron oxides and hydroxides (yellow, red, brown, black) (E 172)
Coconut shell meal
(Purity requirements: no foreign components, in particular salmonellae-free)
c) For agglutinants, adhesives and thickeners for cigars and smoking tobacco:
Caramel color
d) For chewing tobacco and black twisted tobacco: Iron (III) sulfate
(Purity requirements: conforms to the pharmacopoeia)
Tannin
e) For snuff:
Iron (III) sulfate
Purity requirements: conforms to the pharmacopoeia)
Tannin
Iron oxide, red (E172)
Carbo medicinalis vegetabilis (E 153)
Indigo I (E 132)
11. Softeners for printing inks and varnishes for cigarette paper, cigarette filters, filter wrappers, tips and filter (tipping) paper:
Glycerol acetates
12. Binders for printing inks and varnishes for filter wrappers, tips and filter (tipping) paper:
Substances listed in No. 3a.
13. Substances for imprints on cigarette paper; plugwraps; filter (tipping) paper:
a) Pigments listed in the Additives Approval Ordinance of January 29, 1998 (BGBl. I p. 230, 231), which was last amended by Article 3 of the Ordinance of May 21, 2012 (BGBl. I p. 1201)
b) Other substances named above in No. 10a and 10b, No. 11 and No. 12.
c) Chrysoine S (E 103)
Fast yellow AB (E 105)
Orcein (E 121)
Scarlet red (E 125)
Ponceau 6 R (E 126)
Antraquinone blue (E 130)
Black 7984 (E 152)
d) Magnesium carbonate
Aluminum oxide
Unsaturated drying oils, i.e. linseed oil and wood oil and standing oils produced by heating
Paraffin, liquid and viscous
Deodorized mineral oil up to 25% by vol. in the finished printing ink
(Purity requirements: boiling range at 1.013 millibar (760 torr) 200-350° Celsius, free of all substances imparting odor or taste)
Hydrogenated esters of rosin with triols and polyols C3 - C6 Phenol-
formaldehyde modified rosin
Xylene-formaldehyde modified rosin
Acrylic acid and/or maleic acid modified rosin and its esters with triols and polyols C3 - C6
Alkyd resins (polyesters of polyols and phthalic acid), also fatty acid-modified; chain length of fatty acids of C6 and above
Condensation products as well as etherified condensation products of purified monohydric and polyhydric phenols (alkylated as needed) with formaldehyde
Xylene-formaldehyde resins and their condensation products with phenol or alkylated phenols
Fatty-acid modified phenol-formaldehyde resins, chain length of fatty acid greater than C6
Drying substance according to DIN 55901: salts and oxides of manganese, iron,
calcium, zirconium and cerium with napthenic acids, saturated, primarily tertiary 
monocarboxylic acids C9-C11 and 2- ethylhexanoic acid
The varnish film may not contain more than 0.2% of cobalt or 0.5% of the other drying 
substances (each relative to the metal).

14. Other additives
a) For chewing tobacco:
Ammonium chloride
Aluminum potassium sulfate
Calcium chloride
Monopotassium tartrate
Saccharin
b) For snuff:
Yeast
Edible fats and oils
Decoumarinized tonka beans; the coumarin content of the snuff may not exceed 0.003%
Ammonium carbamate
Sodium carbonate
Potassium carbonate
Calcium carbonate (E 170)
Ammonium chloride
Ammonium hydroxide
Calcium chloride
Calcium hydroxide
Monopotassium tartrate
1,3-Butylene glycol (1,3-butanediol)
(Purity requirements: See No. 1)
c) For white snuff powder:
Ammonium carbonate
Sodium carbonate
Calcium carbonate (E 170)
Ammonium chloride
Calcium chloride

<table>
<thead>
<tr>
<th>Column a</th>
<th>Column b</th>
<th>Column c</th>
<th>Column d</th>
</tr>
</thead>
<tbody>
<tr>
<td>chron. number</td>
<td>Substance</td>
<td>Area of application, use, requirements</td>
<td>permitted until</td>
</tr>
<tr>
<td>1</td>
<td>Hydroxypropyl starch (E 1440)</td>
<td>Agglutinants, adhesives and thickeners for cigars, cord-like tobacco including black tobacco rolls, reconstituted tobacco and artificial wrappers as well as adhesives for side seams, filter wrappers, tips and filter (tipping) papers for cigarettes</td>
<td>05/19/2016</td>
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<tr>
<td>2</td>
<td>Acetyl tributyl citrate</td>
<td>up to 10% of the product Softeners for printing inks and varnishes for cigarette paper, cigarette filters, filter wrappers, tips and filter (tipping) paper</td>
<td>05/19/2016</td>
</tr>
</tbody>
</table>

Annex 2 to Article 2(1)
Prohibited olfactory and gustatory substances
(Source: BGBl. I 1977, 2837)

1. Agaric acid (Agaricin, Acidum agaricinicum)
   Birch tar oil (Oleum betulae empyreumaticum)
   Bitter almond oil with free or bound cyanides
Sassafras oil (Oleum sassafras)  
Juniper tar oil (Oleum juniperi empyreumaticum)  
Camphor oil  
Camphor  
Coumarin  
Safrole  
Thujone  

2. Olfactory and gustatory substances produced from stipules of bittersweet (Stipites dulcamae)  
Camphor wood (Lignum camphorae)  
Polyody root (Rhizoma polypodii, Rhizoma filicis dulcis)  
Mint of Penny-royal (Herba pulegii) Quassia (Lignum quassiae, bitter wood)  
Quillaia bark (Cortex quillaiae)  
Tansy (Herba Tanaceti)  
Rue (Herba rutae)  
Sassafras wood (Lignum sassafras)  
Sassafras leaves (Folia sassafras)  
Sassafras bark (Cortex sassafras)  
Melilot (Mililotus officinalis)  
Tonka beans (Semen toncae)  
Woodruff (Asperula odorata)  

Annex 3 to Article 3a(1)  
(Source: BGBl. I 2006, 451 - 452)  

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Substance name</th>
<th>Maximum limit mg/kg, relative to the percentage of tobacco</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldicarb</td>
<td>116-06-3</td>
<td>2-Methyl-2-(methylthio)-propionaldehyde-O-(methylcarbamoyl)oxime</td>
<td>)</td>
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<tr>
<td>Aldicarb sulfoxide</td>
<td>1646-87-3</td>
<td>2-Methyl-2-(methylsulfinyl)-propionaldehyde-O-(methylcarbamoyl)oxime</td>
<td>) Collectively Aldicarb</td>
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<tr>
<td>Aldoxy carb</td>
<td>1646-88-4</td>
<td>2-Methyl-2-(methylsulfonyl)-propionaldehyde-O-(methylcarbamoyl)oxime</td>
<td>)</td>
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<tr>
<td>Aldrin</td>
<td>309-00-2</td>
<td>1,2,3,4,10,10-Hexachlor-1,4,4a,5,8,8a-hexahydro-1, 4-endo-5,8-exodimethanophthalene</td>
<td>)</td>
</tr>
<tr>
<td>Uleiorn</td>
<td>123-59-0</td>
<td>1,2,3,4,10,10-Hexachlor-1,4,4a,5,8,8a-octahydro-1, 4-endo-5,8-exodimethanophthalene</td>
<td>) Collectively</td>
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<td>Camphechlor (Toxaphene) (see Polychlorterpene)</td>
<td>8001-35-2</td>
<td>1,2,4,5,6,7,8,8-Octachlor-3a,4,7,7a-tetrahydro-4,7-endomethanoindan</td>
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<td>Chlordane</td>
<td>57-47-9</td>
<td>1,2,4,5,6,7,8,8-Octachlor-3a,4,7,7a-tetrahydro-4,7-endomethanoindan</td>
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<td>DDT</td>
<td>50-29-3</td>
<td>1,1,1-Trichlor-2,2-bis-(4-chlorphenyl)-ethane</td>
<td>) Collectively expressed as DDE</td>
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<td>DDE and Isomers</td>
<td>72-55-9</td>
<td>1,1-Dichlor-2,2-bis-(4-chlorphenyl)-ethane</td>
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</tr>
<tr>
<td>Diflubenzuron</td>
<td>35367-38-5</td>
<td>1-(4-Chlorophenyl)-3-(2,6-difluorobenzoyl)-carbamide</td>
<td>100</td>
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<tr>
<td>Dimefox</td>
<td>115-26-4</td>
<td>N,N,N',N'-Tetramethylamino-phosphoric acid fluoride</td>
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<td>Compound</td>
<td>CAS Number</td>
<td>Description</td>
<td>Concentration</td>
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<td>------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
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<tr>
<td>Endrin</td>
<td>72-20-8</td>
<td>1,2,3,4,10,10-Hexachlor-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-5,8-dimethanoanaphthalene</td>
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<tr>
<td>Flumetrafin</td>
<td>62924-70-3</td>
<td>N-(2-Chlor-6-fluorobenzyl)-N-ethyl-4-trifluormethyl-2,6-dinitroaniline</td>
<td>20</td>
</tr>
<tr>
<td>HCH Isomers except for Lindane</td>
<td>608-73-1</td>
<td>1,2,3,4,5,6-Hexachlorocyclohexane-Isomers except gamma-1,2,3,4,5,6-Hexachlorocyclohexane</td>
<td>1</td>
</tr>
<tr>
<td>Heptachlor (alpha and beta-Isomer)</td>
<td>76-44-8</td>
<td>1,4,5,6,7,8,8-Heptachlor-3a,4,7,7a-tetrahydro-4,7-endo-methanoinden</td>
<td></td>
</tr>
<tr>
<td>alpha-Isomer</td>
<td>28044-83-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>beta-Isomer</td>
<td>1024-57-3</td>
<td>Collectively expressed as Heptachlor</td>
<td>0.2</td>
</tr>
<tr>
<td>Heptachlor-epoxide</td>
<td>1024-57-3</td>
<td>1,4,5,6,7,8,8-Heptachlor-2,3-epoxy-3a,4,7,7a-tetrahydro-4,7-endo-methanoindan</td>
<td></td>
</tr>
<tr>
<td>Hexachlorbenzene</td>
<td>118-74-1</td>
<td></td>
<td>0.3</td>
</tr>
<tr>
<td>Phosphorus hydride Phosphide</td>
<td>7803-51-2</td>
<td>Collectively expressed as Phosphorus hydride</td>
<td>0.01</td>
</tr>
<tr>
<td>Polychloroterpene (Camphechlor, Stroban and other polychlorinated terpenes)</td>
<td></td>
<td>Chlorinated Camphene (67-69% Chlorine) collectively</td>
<td>5</td>
</tr>
<tr>
<td>Terbufos</td>
<td>13071-79-9</td>
<td>O,O-Diethyl-S-tert-butyl=thiomethyl-dithiophosphate</td>
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</tr>
<tr>
<td>Terbufossulfoxide</td>
<td>10548-10-4</td>
<td>O,O-Diethyl-S-tert-butyl=sulfinylmethyl-dithiophosphate</td>
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</tr>
<tr>
<td>Terbufossulfone</td>
<td>56070-16-7</td>
<td>O,O-Diethyl-S-tert-butylsulfonylmethyl-dithiophosphate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collectively expressed as Terbufos</td>
<td>0.05</td>
</tr>
</tbody>
</table>