

## 34.04

### 34.04 - Artificial waxes and prepared waxes.

3404.20 - Of poly(oxyethylene) (polyethylene glycol)

3404.90 - Other

This heading covers artificial waxes (sometimes known in industry as “synthetic waxes”) and prepared waxes, as defined in Note 5 to this Chapter, which consist of or contain relatively high molecular weight organic substances and which are **not** separate chemically defined compounds. These waxes are :

- (A) Chemically produced organic products of a **waxy character**, whether or not water-soluble. Waxes of **heading 27.12**, produced synthetically or otherwise (e.g., Fischer-Tropsch waxes consisting essentially of hydrocarbons) are, however, **excluded**. Water-soluble waxy products having surface-active properties are also **excluded (heading 34.02)**.
- (B) Products obtained by mixing two or more different animal waxes, different vegetable waxes or different waxes of other classes or by mixing waxes of different classes (animal, vegetable or other) (for example, mixtures of different vegetable waxes and mixtures of a mineral wax with a vegetable wax). Mixtures of mineral waxes are, however, **excluded (heading 27.12)**.
- (C) Products of a **waxy character** with a basis of one or more waxes and containing fats, resins, mineral substances or other materials. Unmixed animal or vegetable waxes, whether or not refined or coloured, are, however, **excluded (heading 15.21)**. Unmixed mineral waxes or mixtures of mineral waxes, whether or not coloured, are also **excluded (heading 27.12)**.

The products described in (A), (B) and (C) above, when mixed with, dispersed (suspended or emulsified) in or dissolved in a liquid medium, are however **excluded** from this heading (**headings 34.05, 38.09**, etc.).

The waxes of paragraphs (A) and (C) above must have :

- (1) a dropping point above 40 °C; and
- (2) a viscosity, when measured by rotational viscometry, not exceeding 10 Pa.s (or 10,000 cP) at a temperature of 10 °C above their dropping point.

In addition, such products generally display the following properties :

- (a) they take a polish when gently rubbed;
- (b) their consistency and solubility depend largely on temperature;
- (c) at 20 °C :
  - (i) some are soft and kneadable (but not sticky or liquid) (soft waxes), others are brittle (hard waxes);
  - (ii) they are not transparent but may be translucent;
- (d) at temperatures above 40 °C, they melt without decomposing;
- (e) just above their melting point they cannot easily be drawn into threads;
- (f) they are poor conductors of heat and electricity.

The waxes of this heading vary in chemical composition. Such waxes include :

- (1) Polyalkylene waxes (e.g., polyethylene wax). They are used in packaging materials, textile lubricants, polishes, etc.
- (2) Waxes obtained by partial oxidation of hydrocarbon waxes (such as synthetic or natural paraffin wax). They are used extensively in polishes, coatings, lubricants, etc.
- (3) Waxes composed of mixtures of chloroparaffins, polychlorobiphenyls or polychloronaphthalenes. They are used in flame-proofing, as insulators, capacitor impregnators, lubricants, wood preservatives, etc.
- (4) Poly(oxyethylene) (polyethylene glycol) waxes. They are water-soluble and are used in cosmetics or pharmaceuticals, as binding agents, softeners, preservatives and in adhesives for textiles or paper, in inks or rubber compositions, etc.
- (5) Waxes composed of mixtures of fatty ketones, fatty esters (such as propylene glycol monostearate modified with small quantities of soap, and mixed glycerol mono- and distearate esterified by tartaric acid and acetic acid), fatty amines or fatty amides. They are used in cosmetics, polishes, paints, etc.
- (6) Waxes obtained by partial or complete chemical modification of natural waxes such as lignite wax.
- (7) Waxes composed of two or more different waxes (**except** mixtures of mineral waxes which fall in **heading 27.12**) or one or more waxes with other material, for example, wax consisting of paraffin wax and polyethylene, used as coating material, wax composed of paraffin wax and stearic acid, used as raw material for making candles, wax composed of oxidised hydrocarbon wax and emulsifier; sealing wax and waxes of similar composition, however they are put up, **other than** products of **heading 32.14**.

The above waxes, if coloured, are also classified here.

Apart from the exclusions mentioned above, the heading **does not cover** :

- (a) Lanolin alcohols, even if having the character of waxes (**heading 15.05**).
- (b) Hydrogenated oils, even if having the character of waxes (**heading 15.16**).
- (c) Separate chemically defined organic compounds (**Chapter 29**).
- (d) "Dental wax" and "dental impression compounds", put up in sets, in packings for retail sale or in plates, horseshoe shapes, sticks or similar forms (**heading 34.07**).
- (e) Industrial monocarboxylic fatty acids and industrial fatty alcohols, even if having the character of waxes (**heading 38.23**).
- (f) Mixtures of mono-, di- and tri-, fatty acid esters of glycerol, not having the character of waxes (**heading 38.24**).
- (g) Mixed polychlorobiphenyls and mixed chloroparaffins, not having the character of waxes (**heading 38.24**).
- (h) Poly(oxyethylene) (polyethylene glycol) not having the character of waxes (e.g., **heading 38.24** or **39.07**).
- (ij) Polyethylenes not having the character of waxes (e.g., **heading 39.01**).