



Technical Data Sheet

Candelilla Wax INCI Name: EUPHORBIA CERIFERA CERA
Light Special Candelilla CAS number: 8006-44-8

I.-Family Description

Candelilla wax is obtained from the Euphorbia Cerifera plant, which grows wild in northern Mexico. To protect itself from adverse weather conditions and to retain moisture, the candelilla plant covers itself with a gray powder composed mostly of wax. Light Special Candelilla is a high purity wax made from the wild Candelilla plant (Euphorbia Cerifera). Typical chemical composition of wax : high hydrocarbon content (linear n-alkanes, mainly hentriacontane, C31, around 50-57%) and a low amount of volatile compounds (short carbon chain n-alkanes, ketones, aldehydes, aromatic alcohols). Its resin content can be between 12-15% by weight, which contributes to its adhesive properties. Light Special Candelilla also has protective, plasticizing properties, high chemical stability, high melting point, impermeability, dielectric properties and gloss.

II.-Product Description.

Light Special Candelilla is a refined wax product, processed through additional filtering and bleaching, that yields a light yellow color in the final product , like carnauba wax, it is highly recognized for its high hardness with resistance to wear and tear, but unlike this, it has a better performance in terms of imparting a moisture barrier , due to the high content of hydrocarbons it contains.

It has a composition based mainly on: Hydrocarbons (50-57%), Esters (28-29%), Alcohols, Estroles and Resins (12-14%) and Free Acids (7-9%). Light Special Candelilla is recognized by the United States Food and Drug Administration (FDA), as a safe natural substance – GRAS, Generally Recognized As Safe – for its application in the food industry , thanks to its vegetable origin and the unique properties , protection, and consistency it imparts.

III.-Main Applications.

Sector	Performance
Cosmetics (Lipsticks)	Essential ingredient for adjusting the softening point of the product as it has a high oil absorption capacity, preventing oil migration, a phenomenon better known as "sweating" . Improves smoothness, hardness, brilliance and softening point.
Pharmaceutical	Used as a polish, to impart shine.
Inks	Protection against humidity and improved sliding capacity.
Fruit coating	Retards ripening and aging, prevents dehydration, provides a beautiful and natural brilliant finishing.
Leather finishing	Gives shine improving the appearance of the leather. It imparts the moisture barrier property, lengthening the life of the leather.
Furniture and floor finishes	Gives bright, stable, tough and flexible film. Improves adhesion and moisture resistance of wax finishes, adds uniform and smooth texture. Blended with carnauba wax and premium quality oils to produce Hard Wax Oil to give superior protection to wooden floors and furniture.

IV.- Compatibility.

Light Special Candelilla is compatible with a wide variety of waxes, and thus it can be blended with: All vegetable and animal waxes – Mineral waxes such as montan wax, paraffin and microcrystalline – Fatty acids and hydrogenated waxes – Synthetic waxes such as polyethylene, oxidized polyethylene, polypropylene, esters – Homopolymers such as low density polyethylene – Copolymers such as ethylene-vinyl-acetates (EVA) – Natural resins such as tar and shellac.

V.- Physical-Chemical Properties.

Analysis	Method	Specifications
Melting Point (°C)	USP 741 CLASS II	69 - 73
Acid Number (mg KOH / g)	USP 401	12 - 22
Ester Number (mg KOH/g)	USP 401	31 - 43
Saponification (mg KOH/g)	USP 401	43 - 63
Color Gardner	ASTM D-1544	9 - 12
Penetration (dmm)	ASTM D-1321	0-2
*Typical Value 0		

VI.-Presentation and Handling.

- Light Special Candelilla is available in pastilles presentation.
- Its handling does not require special conditions or precautions.
- The color tonality of the solid material can vary .
- Due to the nature of the material the intensity of the characteristic odor may vary .

VII.-Certifications.

The product does not have certification.

Additional Information

Applicable regulation:

- 21 CFR Sec. 184.1976
- Prop. 65: Raw materials are not listed as substances that cause cancer or birth defects or other reproductive harm

Disclaimer:

- The product can be used only for the main applications as specified hereabove.
- It is the customers responsibility to inspect and test our products in order to assure the suitability of them for the customer's particular purpose.
- The USP method mentioned in the physicochemical properties corresponds only to the method of analysis carried out.