



255 Fountain Street Akron, Ohio 44304-1991  
330-535-2100 ♦ 800-321-2260 ♦ Fax 330-535-8947

## WAXES -NATURAL-

### ABOUT NATURAL WAXES

#### WAXES

Waxes, both natural and synthetic, are widely used by rubber compounders. This summary may prove of value in connection with problems on tire paints, mold solutions, wire insulation, soles and heels, molded and extruded products, drug sundries, polishes, etc.

#### BEESWAX

Available in slabs in two grades: Yellow Refined & White Refined (USP). All grades are amorphous.

Yellow Refined Beeswax at low temperatures is brittle and a fine granular structure. Unlike paraffin wax, which tends to have a crystalline structure, Beeswax is amorphous.

White Refined Beeswax is pure white or very slightly yellow in color. It is odorless, more brittle than Yellow Refined, and a slightly higher gravity.

Beeswax consists chiefly of a mixture of crude Cerotic Acid and its homologs, Myricin, which is an ester of Myricyl Alcohol and Palmitic Acid. It contains some free Melissic Acid, Nyricyl Alcohol and uncombined Ceryl Alcohol.

Beeswax is used in rubber compounding for improving the surface finish of molded goods, and as a mold lubricant.

#### CARNAUBA WAX

Available in lump, flaked or powdered form, with the #1 Light Yellow Powder and our #3 N.C. Flake being the most widely used.

Crude Carnauba is olive green to yellow, but on refining can be bleached almost white.

Carnauba Wax is very hard and melts from 180°F to 185°F. It has good electrical properties. It is used in rubber compounding (1% to 2%) as a stiffener for cured stocks, for improving the surface of molded goods, as a mold release, and as a polish for hard rubber goods.

## CERESIN WAX

Ceresin wax is amorphous and odorless. It is available in slab form only. This product is white and has a typical melting point of 140 - 145°F.

Ceresin Wax is a Mineral Wax which, like Paraffins, consists of a group of Hydrocarbons related to Methane. Ceresin Wax produces stable mixtures with oils which cannot be separated either by filtration or sweating. Ceresin occurs naturally as Ozokerite, and market grades are purified Ozokerite obtained from Lignites. It has a zero value for acid number and saponification number.

The low acid number and inert properties of these waxes are of importance in rubber compounding.

Ceresin Waxes are also used in polishes, insulating compounds, waterproofing applications, and to improve processing and surface finish of molded rubber goods.