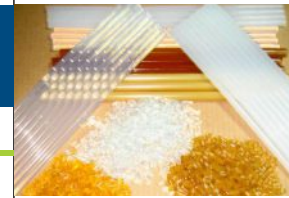


HOT MELT ADHESIVE COATING RUBBER  
COLOR CONCENTRATE PVC PROCESSING  
THERMOPLASTIC ROAD MARKING RUBBER PETROLEUM WAX BLENDS  
COLOR MASTERBATCH CABLE FILLING  
RUBBER PVC PROCESSING PLASTIC ADDITIVE INKS  
CABLE FILLING RUBBER HOT MELT ADHESIVE  
PETROLEUM WAX BLENDS PVC PROCESSING  
THERMOPLASTIC ROAD MARKING

# CP-WAX™

Polyethylene Homopolymer Wax





## About us

Cosmic is a customer driven manufacturer of wax products, Polyethylene Wax, PE Wax and specialty additives for a wide range of industries. The products produced by the company are special products which are important ingredients for: PVC Stabilizers, Master Batches, Floor Finishes, Graphic Arts Coatings & inks, Furniture Polishes, Cleaners, Paints, Industrial Coating, Synthetics Products, Textiles and Industrial compounds.

Equipped with the state of art technology, Cosmic Petrochem is headed by entrepreneurs, technocrats and quality conscious personalities, who add new enthusiasm to each and every professional who strides along, to see and make sure that only the best reaches the buyers.

Our technical team can help and assist in selecting the right Cosmic Product you need to modify the surface properties including adhesion, rub resistance, slip, anti-blocking, surface tension, release or water resistance of your coating. If one of our standard products does not meet your requirements we will custom formulate a product to meet your needs.

Passionate and committed, the Cosmic Management brings together a dynamic team of engineering, business, and social visionaries who provide direction to Cosmic Managers in a vibrant economic and business environment.

The Management consists of senior officials including all active founders, along with members who are high achievers in the business and society.

## CP-WAX™

**CP-WAX** is a high quality non-oxidised, non-polar polyethylene homopolymer wax, produced by our proprietary manufacturing process based on molecular distillation technology. CP waxes are fully saturated homo polymers of ethylene that have high degrees of linearity and crystalline. Distilled grades are highly refined waxes having narrow molecular weight distributions and, consequently, narrow melt distributions. They also have low melt viscosities and are hard, even at elevated temperatures. Because CP polyethylene waxes are fully saturated, they exhibit excellent heat stability and resistance to chemical attack.

### Features & Benefits

Our proprietary CP polyethylene manufacturing process yields materials that provide benefits that are unique and quite distinct from other synthetic or petroleum based waxes. The manufacturing process can be controlled to the extent that the molecular weight and molecular weight distribution are consistently achieved

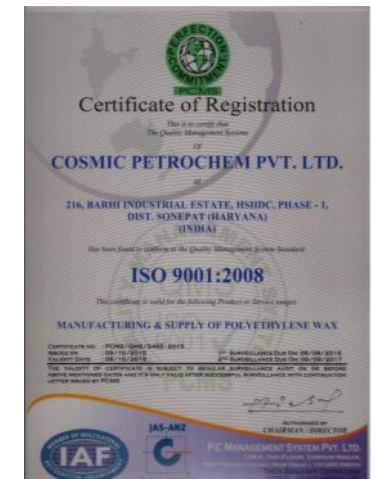
### FEATURES

- High crystalline
- Controlled molecular weight and narrow poly disparity
- Fully linear and fully saturated

### BENEFITS

- Low solubility in solvents
- Hardness at elevated temperatures
- Oil thickening capability
- Formulating flexibility
- Low melt viscosity
- Narrow melt range
- Resistance to chemical attack
- Excellent heat stability

An ISO certified company



[www.cosmicpetrochem.com](http://www.cosmicpetrochem.com)







## CP-WAX POLYETHYLENE HOMOPOLYMER WAX : REFINED (DISTILLED) TYPE

Product Name	Form	Viscosity at 149 °C (cPs) ASTM D 3236	Density (g/cm3) ASTM D 505	Dropping point (°C) ASTM D 3945	Penetration hardness (d.mm) ASTM D 1321	Recommended Applications	Key Characteristics
CP 700	Flakes	Below 30	0.93-0.94	111+/- 1	5	Filler masterbatch PVC pipes PVC one pack stablizer thermoplastic road marking paint PVC cable compound	- High melting and softening point
CP 300	Flakes	Below 50	0.93-0.94	114+/- 1	3-4	Hot Melt Adhesive One Pack Stabilzer PVC Pipes	- Low viscosity
CP 300 Plus	Flakes	Above 80	0.93-0.94	115+/- 1	3-4	Black masterbatch PVC pipes plastic additive	- Excellent head resistance & thermal stability
CP 400	Prills	Less than 50	0.91-0.94	112+/- 1	5	Filler masterbatch PVC pipes PVC one pack stablizer thermoplastic road marking paint PVC cable compound	- High hardness level
CP 500	Prills	Less than 25	0.91-0.94	115+/- 1	3-4	Pvc pipes one pack stablizer hot melt adhesives Filler and black masterbatch Thermoplastic road marking paint PVC cable compound	- Excellent compatbility with other waxes - Excellent lubrication

## CP-WAX POLYETHYLENE HOMOPOLYMER WAX : NON-REFINED TYPE

Product Name	Form	Viscosity at 149 °C (cPs) ASTM D 3236	Density (g/cm3) ASTM D 505	Dropping point (°C) ASTM D 3945	Penetration hardness (d.mm) ASTM D 1321	Recommended Applications	Key Characteristics
CP 100	Flakes	Less than 100	0.91-0.94	109+/- 1	>8	PP Filler MasterBatch	None

**DISCLAIMER :**

- The product can be used only for the applications as specified herein.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publicaion, however we do not assume any liability whatsoever for the accuracy and completeness of such information.
- We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
- It is the customer's responsibility to inspect and test our product in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.  
- Please see our Material Safety Data Sheet for details on various aspects of safety, recovery and disposal of the products;  
For more information, contact  
COSMIC Petrochem Pvt. Ltd. Technical Service team





## APPLICATIONS

CP-WAX polyethylenes have been used as performance additives in a wide range of industrial applications.

## PLASTICS ADDITIVES

CP-WAX polyethylenes have been used to improve and enhance process parameters and finished product properties in a variety of applications in the plastics industry. Highly effective nucleating agents and bead coating agents in expandable polystyrene processing, leading to the production of world-class finished products. Flow modifiers, lubricants and release agents at usage levels of 0.5 to 5% providing improved processing of polyethylene, polypropylene, polystyrene, polyvinyl chloride and other thermoplastics. Superior anti-blocking agents that may be added internally and/or externally in thermoplastic elastomer processing applications. The performance ingredient in water-based and solvent-based mold release agents for the processing of polyurethane foam and other plastics. Lubricants and release agents for engineering resins.

## INK, IMAGING AND COATING APPLICATIONS



Highly attractive results have been observed in ink, coating and digital imaging applications

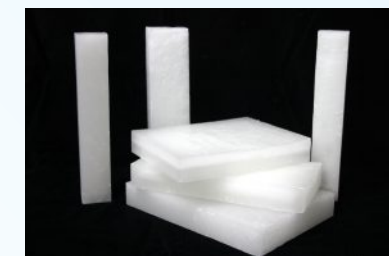
after the addition of CP-WAX polyethylenes at low concentrations. Improved rub and mar resistance and slip characteristics may be secured by addition of 0.5 to 2% micronized CP-WAX polyethylenes to lithographic and flexographic inks. Improved flattening that is not subject to over-grinding may be obtained using CP-WAX polyethylene concentrations of about 3%. Because of its excellent resistance to solvents, micronized CP-WAX has been used to provide excellent slip and rub properties in highly aggressive solvent systems such as publication gravure printing systems. Improved slip characteristics may be achieved in stir-in ink applications where CP-WAX polyethylenes can be used as substitutes for PTFE. In dry toner applications CP-WAX polyethylenes act as anti-offset agents when applied via heat fixation, or softening point modifiers when applied via pressure fixation. Because of their hardness and narrow melt distribution, CP-WAX polyethylenes are used as performance enhancing additives in thermal transfer ink and hot melt ink-jet applications. CP-WAX polyethylenes have improved the leveling and slip of polyester powder coatings at concentrations of 0.75 to 2%.



## PERFORMANCE ADDITIVES FOR HOT MELT ADHESIVES AND COATINGS

CP-WAX polyethylenes have been used to enhance the properties of hot melt adhesives. CP-WAX polyethylenes can be used to lower the viscosity of hot melt formulations and, at the same time, increase the softening point. CP-WAX polyethylenes can cause a seeding effect in the hot melt formulation causing crystallization of the adhesive on the substrate to occur more readily. CP-WAX polyethylenes can be used at low concentrations to significantly raise the solidification point of a hot melt formulation. CP-WAX polyethylenes are a performance ingredient in temporary and permanent anti-corrosion hot melt dip coatings for automobile applications.

## APPLICATIONS AS PHASE CHANGE MATERIALS



The exceptional thermal properties of CP-WAX polyethylenes may be exploited in a number of ways. Because of their precise melt point and narrow melt distribution, CP-WAX polyethylenes are used as the performance ingredient in the manufacture of automotive thermostats. The relatively high heat of fusion of CP-WAX polyethylenes leads to their being most useful in the production of food warming jackets.

## IMPROVING THE PROPERTIES OF CABLE FILL COMPOUNDS

CP-WAX polyethylenes are used as the performance additive in high sag point polyisobutene-based cable fill compounds for fibre optic cables. CP-WAX polyethylenes exhibit efficacy in mineral oil and petrolatum-based cable fill compounds, having outstanding properties with regard to oil bleed and dimensional stability.



## IMPROVING THE PROPERTIES OF LOWER GRADE PARAFFIN WAXES

The properties and value of lower grade paraffin waxes may be significantly improved by the addition of small amounts of CP-WAX polyethylenes. Higher hardness and higher melting point may be achieved with minimal effect on melt viscosity and cloud point. Surface oil bleed may be reduced, block and pick points raised and abrasion resistance improved

## PRODUCT FORMS

CP-WAX polyethylenes are available in the conventional prill/flakes form. They are also available in the micronized form in sizes 5, 10, 20, 60 and 120 micron.