

CP 450

Vinyl Chloride and Vinyl Acetate Copolymer

Product Description

CP-450 is a medium molecular weight copolymer comprised of approximately 87% vinyl chloride and 13% of vinyl acetate. It is supplied as a powder.

Applications

Typical application for CP450 :

- Adhesives
- Printing Inks
- Industrial Coatings
- Over lacquers
- Flooring

Properties

Properties	Unit	Value	Test methods
Molecular weight (Mw)	-	53,300	GPC
Degree of polymerization	-	550±50	JIS K-6720-2
K-value	-	53	-
VAM content	wt%	13.5±1	Hanwha –method
Bulk Density	g/cm ³	0.58± 0.07	JIS K-6720-2
Volatile content	%	Max.4.0	JIS K-6720-2
Glass transition temperature (Tg)	°C	74	DSC
Particle size distribution	%	100	42mesh pass
Viscosity (MEK/Tol=1/1) • Resin 10% • Resin 20% • Resin 30%	cPs	10 66 1374	Brookfield Viscometer

Processing

CP-450 is the solution vinyl resin which is distinguished for the solubility with various kinds of organic solvent. It has good resistance for abrasion, water and chemical variation. It also has good adhesive strength and surface gloss.

Ketone type such as cyclohexanone, MEK and MIBK is suitable for its solvent, and some aromatic hydrocarbon type like toluene and xylene can be used for the diluent. Beyond them, butyl acetate or ethyl acetate (ester type) can be used for the solvent,

but it is required to increase the solving temperature or to mix with ketone type since its solubility is inferior to that of the ketone type.

Some plasticizer is suggested to be used for increasing the flexibility of film. CP-450 exhibits excellent properties being used with various kinds of plasticizers such as phthalates or adipates.

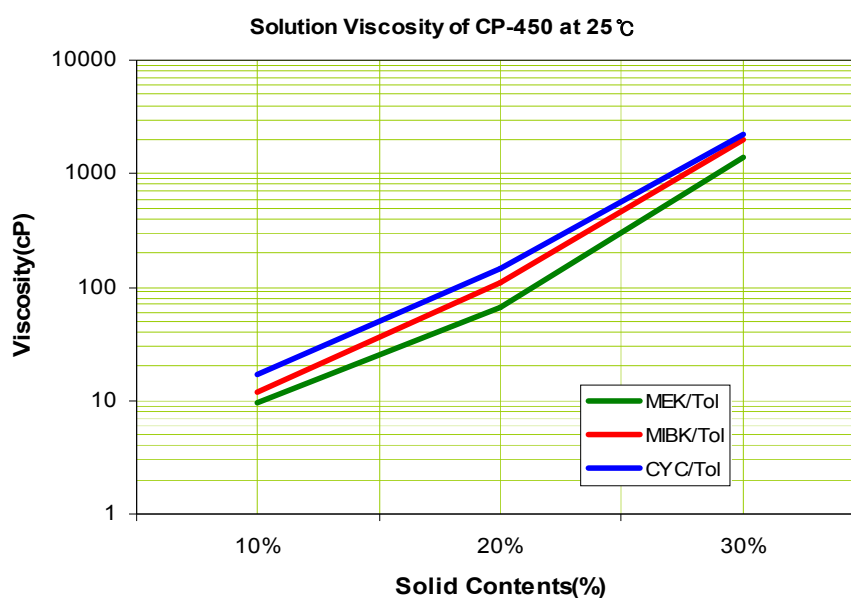
CP-450 can be used by blending with acrylic, ketone and epoxy resin as well as other vinyl resin since it suits with them very much.

CP-450 can be applied for flooring products through some processing methods such as calendaring, extruding and injection molding as it has good molding properties with plasticizer or filler. In this case, it may be used by itself or used with a kind of PVC homo-polymer which has low molecular weight (K value 57~58).

Formulation

<i>Material</i>	<i>Ink, Paints (%)</i>	<i>Adhesives(%)</i>
CP-450	10~15	25
MEK(Methyl ethyl ketone)	15	15
Toluene	30	20
Acetone	30	40
Propylene Oxide	0.05~0.2	-
Plasticizer	2~4	-
Pigment	2~25	-
Others	-	1~2

Solution Viscosity



The information given herein and other otherwise supplied to users is based on our general experience and where applicable, on the results of tests on samples of typical manufacture. However, because of the many factors which are outside knowledge and control, which can effect the use of these products, users must rely on their own judgment and we cannot accept liability for any injury, loss or damage resulting from reliance upon such information.

Storage

Store CP-450 under dry conditions and at room temperature below 25°C. Under these conditions, the product has a shelf life of at least one year, from the delivery date. If the material is kept beyond the recommended shelf life, it is not necessarily unusable, but the user should perform a quality control on the properties relevant to the application. The properties determined in our prerelease quality control may change during storage, depending on storage conditions, and deviate from the specification.

Safety and Handling

The Hanwha Chemical Corporation provides its customers with a product specific Material Safety Data Sheet (MSDS) to cover potential health effects, safe handling, use and transportation. Hanwha Chemical Corporation strongly encourage its customers to review MSDS on its products and other materials prior to their use.

CP-450 is normally supplied as a power in 25kg polypropylene inner coated paper bag or 500kg Flecon Bag.

CP-450 is not formulated to contain any hazardous or regulated materials such as lead, cadmium, mercury, and chromium compounds. And Hanwha Chemical corporation guarantee that CP-450 do not include any hazardous or regulated materials during the manufacturing process.

Properties

Further information and recommendations for processing can be obtained from our technical support staff and representatives.

The data and recommendations contained in this brochure represent the current state of our knowledge and serve as a guide only to our products and their potential applications. Therefore, no warranty of specific properties of the products mentioned herein nor of their suitability or fitness for a particular purpose is implied.

The information given in this brochure should be checked by preliminary trials because of conditions during processing over which we have no control.