

TP-400M

Vinyl Chloride, Vinyl Acetate, Dicarboxylic Acid Terpolymer

Product Description

TP-400M is a low molecular weight terpolymer comprised of approximately 85% vinyl chloride, 14% of vinyl acetate and 1% of dicarboxylic acid. It is supplied as a powder.

Applications

Typical application for TP-400M :

- . Metallic Lacquers
- . Printing Inks
- . Industrial Coatings
- . Heat-sealable Lacquers
- . Masonry Paints

Properties

Properties	Unit	Results	Test methods
Molecular weight (Mw)	-	45,200	GPC
Degree of polymerization	-	430±30	JIS K-6720-2
K-value	-	50	-
VAM content	wt%	14.0 ± 1	Hanwha-method
Dicarboxylic acid content	wt%	Approx. 1.0	Hanwha-method
Acid value	mg KOH/g	11.0 ± 1	Hanwha-method
Bulk Density	g/cm ³	0.66 ± 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	42 mesh pass
Viscosity (MEK/Tol=1/1) •Resin 10% •Resin 20% •Resin 30%	cPs	8 35 270	Brookfield Viscometer

Processing

TP-400M 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.

It shows good adhesive properties for metal substance such as aluminum or steel as well as PVC as containing carboxyl group.

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. TP-400M exhibits excellent properties being used with various kinds of plasticizers such as phthalates or adipates.

TP-400M can be used by blending with acrylic, ketone and epoxy resin as well as other vinyl resin since it suits with them very much.

Solution Viscosity

Solution Viscosity of TP-400M at 25°C

