Technical Information of INT 3120 Synthetic Resin

INT 3120 synthetic resin is alicyclic linear thermoplasticity resin with nitrous in chemical structure, it is manufactured by new clean technology. The products contain no benzene, toluene, xylene, ketone or other organics. INT 3120 synthetic resin is soluble in almost paint solvents and compatible with practically all coating raw materials. It exhibits excellent yellowing resistance, and can be used to improve hardness, gloss, adhesion of coating. It is a kind of multifunctional environmental-friendly coating/printing additive.

Specification

Property	Data	Test Method
Appearance	Colorless or yellowish brittle solid resin	Naked eye
Softening point (°C)	115-125	ISO 4625-1:2004
Color Gardner[1]	$<$1	ISO 4630-1:2004
Acid value (mgKOH/g)	$<$3	ISO 2114:2000
Hydroxyl value (mgKOH/g)	30-60	DIN 53240-2:1998
Density(g/cm^3)	1.10±0.05	ISO 1183-1:2004(E)B
Kinematic viscosity[2](mm^2/s)	10-30	GB/T 1660-2008
Ford cup 4 viscosity[3](s)	15-25	ASTM D1200
Content of benzene, toluene, xylene	Not detected	SGS

[1] The resin is 50% (mass fraction) solution in butyl acetate and ethanol, they account for 50% and 50% respectively.

[2][3] 50% resin solution of ethanol, solution temperature remains 25°C when viscosity is detected.

Solubility

INT 3120 synthetic resin is soluble in all common paint solvents such as aromatic hydrocarbons, alcohols, ketones, esters but insoluble in water. Its solubility in nonpolar solvents such as mineral oil, aliphatic hydrocarbon, alicyclic hydrocarbon is limited, which should be paid attention.

Application

- INT 3120 synthetic resin can be used in many types formulation of enviromental-friendly coating/printing because the products contain no benzene, toluene, xylene, ketone or other organic.
- It can be used to improve gloss, hardness, adhesion and yellowing of coating.
- It has good solvent release.
- Test must be done on basis of formulation before using.

Storage

INT 3120 synthetic resin must be stored in dry and cool place, the period of validity is one year, it also can be used after one year if examined again and conformance to requirements.