

# **Technical Data Sheet of Synthetic Resin INT 3120**

INT 3120 is a kind of alicyclic linear thermoplastic resin with excellent yellowing resistance and dryingness produced through our exclusive cleaner production technique resulting in no containing of benzene, toluene, xylene, ketone or other organics, soluble in almost paint solvents and widely compatible with coatings raw materials. It is able to definitely improve coating film's adhesiveness, gloss, hardness and solid contents when being used as a kind of eco-friendly and excellent multifunctional additive in coatings/printing ink formulas.

#### 1. Main Technical Data

Property	Description & Data	Test Method
Appearance	Colorlessly crystal or slightly yellowish brittle solid resin	Naked eye
Softening point(℃)	110–120	ISO 4625-1:2004
Color Gardner <sup>[1]</sup>	<2	ISO 4630-1:2004
Acid value(mgKOH/g)	<3	ISO 2114:2000
Hydroxyl value(mgKOH/g)	55 ± 15	DIN 53240-2:1998
Density(g/cm³)	1.10 ± 0.05	ISO 1183-1:204(E)B
Content of benzene, toluene, dimethylbenzene(%)	Not detected	sgs

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

### 2. Solubility

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.

## 3, Application

- Dissolved into solvents to prepare the 50% resin solution, and then added it into coatings/oil ink formulas appropriately. Recommended adding percentage is 5–30% of the formula's total mass.
- · Applicable for environment-friendly coatings/oil ink formulas thanks to its being free of benzene, toluene and xylene.
- · Effectively to improve coating film's yellowing-resistance gloss, adhesiveness, hardness and gloss.
- · Excellent drying speed and solvent releasing speed;
- · Used in baking finish formula for its good heat endurance;

### 4. Package & Storage

- · Package: 25kg/bag
- · Stored in dry and cool environment.
- · Shelf life not less than 12 months and able to be used after validity period if key data still conform to requirements after being tested.