

Technical Data Sheet of INT Ketone Resin

Ketone resin, also known as polyketone resin, ketonic resin or ketone-aldehyde resin, is the condensation of cyclohexanone and formaldehyde containing carbonyl and hydroxyl groups. It shows excellent compatibility with almost coating/printing raw materials and soluble in almost organic solvents, while INT Ketone Resin distinguishes itself by its decent solubility in alcohols solvent systems such as carbinol and ethanol, resulting in a high formula cost performance. There are INT 105, INT 120, INT 120L and INT 130 for this series with unique character for each one. Still, INT Ketone Resin boasts of high stable quality resulted from mature technology and strict QC process.

1、Main Technical Data

Property	Range	INT 105	INT 120	INT 120L	INT 130	Test Method
Appearance	Colorlessly crystal or slightly yellowish, hard small piece, no obvious mechanical impurities after dissolution					Naked eye
Color Gardner ¹	< 1					ISO 4630-1 : 2004
Softening point(°C)	95-105	105-125	105-125	125-140		ISO 4625-1 : 2004
Dissolve with ethanol	completely	completely	completely	completely		Resin dissolve with ethanol by 50%
Acid value(mgKOH/g)	< 1	< 1	< 1	< 1		ISO 2114 : 2000
Hydroxyl value(mgKOH/g)	70-110	70-110	> 150	> 100		DIN 53240-2 : 1908
Density(g/cm ³)	1.15 ± 0.05					ISO 1183-1 : 2004 (E) B

[1] The resin is 50% (mass fraction) solution in butyl acetate and ethanol, they account for 85% and 15% respectively.

2、Solubility

soluble in almost paint solvents such as aromatic hydrocarbons, alcohols, ketones, esters etc. but insoluble in water. Its solubility in non-polar solvents such as mineral oil, aliphatic hydrocarbon, alicyclic hydrocarbon is limited.

3、Application

Dissolved into solvents to prepare 50–70% resin liquid, then added it into coatings/oil ink formulas. Generally adding percentage is 5–30% of the formula's total mass.

- INT 105 is outstanding in increasing coatings/ink's adhesiveness;
- INT 120 is a universal resin applicable for coatings/ink's adhesiveness, gloss and hardness improvements;
- INT 120L smells lightest and applicable for formulas with strict odor requirement.
- INT 130 owns fastest solvent's releasing speed, applicable for formulas with requirement in this respect.

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.