

## COATING RESINS

### TECHNICAL DATA

### SYNOLAC 3005 (70%)

#### SALES SPECIFICATION

Non-volatile content, % @ 150°C	68 - 72
Viscosity in at 30°C ( 50%in MTO) (By B-4 Ford Cup )	160-180
Colour, Gardner scale (ISO 4630)	≤ 6 Gardner
Acid value, mg KOH/g (ISO 3682)	≤15

#### OTHER PROPERTIES

Volatile	Xylene
Non-volatile content, % @ 150°C	70
Flash point, °C (ISO 3679)	28
Density at 20°C (ISO 2811)	0.98
Oil or Fatty Acid Type	Safflower
Oil Length in %	42%

Note –Acid Value quoted relative to solid resin

#### PRODUCT INFORMATION

**SYNOLAC 3005(70%)** SYNOLAC3005(70%) is a Short oil Alkyd resin which is based on Safflower oil and modified with Glycerol and Pentaerythritol.

**SYNOLAC3005(70%)** is recommended to use in Acid catalysed wood finish. It is available in 70% solids. Particular advantages gained by using this resin include:

- Excellent Colour and colour retention.
- Excellent Gloss and gloss retention.

#### SOLUBILITY:

SYNOLAC3005(70%) is soluble in aliphatic and aromatic hydrocarbons ketones and esters.

**COMPATIBILITY :** SYNOLAC3005(70%) is compatible mostly with all short oil alkyd resins, amino resins, and Nitrocellulose resins.

#### RECOMMENDATIONS:

**SYNOLAC 3005(70%)** is compatible with a wide range of Amino resins and are typically used up in combination with Urea and Melamine formaldehyde.

For an optimum performance with respect to level of cure, flexibility, hardness and impact resistance, a combination of SYNOLAC 3005(70%) with Amino Resin at ratio of 60:40 and 70:30 on solid resin content is suggested. To promote cure the use of 1%- 6% of acid catalyst is recommended mainly a 20% solution of p- toluene sulphonic acid is used.

#### GUIDE LINE FORMULATION:

##### Part A

SYN 3005	-	37.34
UF resin (1)	-	23.94
MF resin(2)	-	4.78
Butanol	-	4.78
BYK 306	-	0.25
Solvent C9	-	4.78
Xylene	-	14.38
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		90.25 kg
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##### Part B

PTSA 20% in IPA	-	10.00
Alkyd : Amino ratio	-	60:40
Catalyst level	-	6% on amino resin
Viscosity at 30°C	-	about 70 sec.
Total Solids	-	45%
Tack free time	-	1.5 hrs.

#### NOTES :

- US-8 resin from Synpol Ltd
- MF 268 from Synpol

**SYNOLAC 3005(70%)** should only be used in applications consistent with the above recommendations. Proposals to use the resin in other ways should be discussed with Cray Valley before any action is taken.