



# SYNPOL PRODUCTS PRIVATE LTD.

Regd Office & Factory: 77, G.V.M.S. AUDYOGIC VASAHA LTD.,  
ODHAV, AHMEDABAD – 382 415, INDIA

PRODUCT CODE : ACRYLIC / 06.10

## SYNPOL AT-68

**TYPE :** Hydroxyl functional acrylic co-polymer solution designed to crosslink at room temperature with polyisocyanate adducts to produce paints suitable for coating flexible substrates such as plastics, e.g. semi-rigid integral skinned polyurethane foams, and PVC.

**SPECIFICATIONS :**

1) Appearance	Water clear viscous liquid.
2) Density @ 25 <sup>o</sup> C.	1.01 - 1.03
3) % Solids @ 150 <sup>o</sup> C. for 30 minutes.	58 - 62
4) Solvent ( mixture by weight )	Xylene : Cellosolve acetate ( 2 : 1 )
5) Viscosity @ 25 <sup>o</sup> C. , poises, gardner	40 - 60
6) Colour, gardner	2 max.
7) Acid value of resin solids, mg. KOH / gm.	8 max.
8) Hydroxyl value of resin solids, mg. KOH / gm.	65 - 75
9) Hydroxyl equivalent weight of resin solids, aprx.	800
10) Mixing ratio of 100 parts by weight of Synpol AT-68	With Desmodur N-75      19.5 parts

**SOLUBILITY :** Synpol AT-68 is soluble in ketones, esters and aromatic hydrocarbons. The solvents chosen for paints and lacquers should be free of water and alcohols.

**COMPATIBILITY :** Synpol AT-68 has very good compatibility with all types of aliphatic and aromatic polyisocyanate and their adducts. However it is advisable to check its compatibility prior to use.

**APPLICATIONS :** Synpol AT-68 is designed for use with aliphatic di-isocyanate adducts and when used as recommended will give films of excellent flexibility. The resin should be blended just prior to application with the stoichiometric quantity of a suitable isocyanate adduct. For example, using an aliphatic di-isocyanate adduct with 16 % reactive isocyanate group, 800 parts of Synpol AT-68 should be reacted with 193 parts of weight of the adduct ( calculated on solids ). For ease of calculation a 4 : 1 solids ratio is perfectly acceptable. The mixing ratio is not critical, but it is preferable to keep to stoichiometric ratios to obtain optimum performance.

**POT LIFE :** When Synpol AT-68 is reacted with Desmodur N-75 in stoichiometric proportions, it has a pot life of greater than 8 hours ( uncatylsed ). Curing rate may be accelerated by the addition of a suitable catalyst such as zinc naphthanate but the addition of such catalysts will lead to a reduction in pot life. Upto 50 % Synpol AT-67 may be blended with Synpol AT-68 to modify or obtain specific properties.

**SUGGESTIVE FORMULATION :**

*White air drying polyurethane paint.*

<b>Part I</b>		kgs.
Titanium dioxide rutile	26.0	
Synpol AT-68	46.0	
M.I.B.K	4.0	
Butyl acetate	<u>4.0</u>	<u>80.0</u>
<b>Part II</b>		
Desmodur N-75	9.0	
M.I.B.K	4.0	
Xylene	4.0	
Cellosolve acetate	<u>3.0</u>	<u>20.0</u>
	Total	100.0

% Solids	60.35	Pigment binder ratio	43 : 57
Viscosity @ 25 <sup>o</sup> C, cps.	450		

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**DISCLAIMER:** Above Specifications are subject to change without prior notice and company reserves the right to modify the same at any time

**MATERIAL SAFETY DATA :**

Product name	Synpol AT-68
Flash point ° C. (Abel closed cup)	31
Flammability	Moderate fire risk due to presence of solvents like Xylene, Cellosolve acetate.
Toxicity	Moderate toxic by exposure and inhalation of vapours of Xylene, Cellosolve acetate and traces of free monomers.
Handling	Keep away from sources of ignition, provide all electric connections of flame-proof design. Wear safety glasses, rubber gloves and protective clothings.
Emergency treatment and measures	
1 Hygienic precautions	Adequate ventilations.
2 Hygienic treatments (First Aid)	Flush eyes thoroughly with water. Apply ophthalmic cortisone for conjunctivitis and keratities. Wash out contaminated skin with soap and water. Gastric lavage (stomach wash), if swallowed, followed by saline catharsis.
3 Fire precautions (in case of outbreaks)	Use dry chemical or carbon dioxide. Water spray may help to keep containers cool, to dilute leaked resins and to diffuse vapours.
Spills and leakage	Absorb liquid materials in sand and collect solid material and burn under hood in incinerator.
Disposal and waste treatment	Spray into furnace under controlled conditions.

**STORAGE :**

Synpol AT-68 should be stored in cool place under shade. The properties are so adjusted to have storage stability of minimum 6 months.

**PACKING :**

25 kgs. M.S. drums, 50 kgs. Plastic carboys and 200 kgs. M.S. barrels.

**DISCLAIMER :**

Information in this literature is to the best of our knowledge true and accurate. However, since conditions under which our products may be used are beyond our control, recommendations are made without warranty or guarantee.

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