

台北市南京東路二段90號3樓

TEL : (02) 25816516 (10 Lines)

FAX : (02) 25317923, 25816899

3F.,90, SEC. 2, NANKING. E. RD. TAIPEI, TAIWAN R .O. C.

E-mail : devinyen @ chansieh.com.tw

## **AP-4070**

### **Description:**

AP-4070 is a solid and thermoplastic MMA-Copolymer, it is strategically designed for pigment grinding vehicle. First, due to its special chemical composition, AP-4070 has the favorable properties for showing great effect on wetting and dispersing. Secondly, AP-4070 possess an excellent compatibility which provides variety of blending rate with other resins including acrylics, olefin resins, vinyl ester resins, epoxies and polyester resins. Other than that, AP-4070 has solubility parameters in the range of between 9 to 11, therefore it is able to be dissolved with wide range of solvent, such as isopropyl alcohol, methyl ethyl ketone, ethyl acetate, butyl acetate, toluene etc.

### **Physical Properties:**

Appearance	Pale yellow pellets
Solids content %	100
Bulk density (g/cm <sup>3</sup> )	1.07
Glass transition temperature Tg (°C)	72
Molecular weight (g/mol)	4,000 to 4,500
Acid Value (mg-KOH/g)	3 to 6

### **Benefits in Application:**

1. Not only AP-4070 could be used for grinding with difficult-dispersing pigments, such as carbon powder, metal oxide, quinacridone red etc. AP-4070 can also easily make pigments status from agglomerate to aggregate even to primary particle, that's the reason why AP-4070 can provide excellent color rendering.
2. In many cases, applying AP-4070 into practice can help the formulator to reduce the concentration of the pigments. In other words, AP-4070 shows a great compatibility blending with solvent and matrix resin. Nevertheless, formula designers should understand whether it is suitable for the intended use, and it's better to have the product assessment beforehand.

\*Some typical viscosities of solutions from AP-4070 in a variety of solvents are listed as below:

Solvent	Solid content (S.C %)	Viscosity (CPS)@25°C
Butyl acetate	50	140
Butyl Cellosolve	50	900
Xylene	50	120
Ethanol/ butyl acetate (80/20)	50	160