

MP-321

Heptafluorodecyl trimethoxysilane

封闭性硅醇树脂改性剂

INTRODUCTION

MP-321 is a special silanol derivative modified with amine blocking. It reacts with multiple functional groups such as amino, hydroxyl, carboxyl, and epoxy groups, promoting adhesion and resistance to damp heat. It is equally effective in thermoplastic formulations and UV-curing systems. Significant performance improvements can be achieved with lower addition amounts in formulations containing cross-linking groups after high-temperature baking. Adding silanol to amino or epoxy group formulations enhances long-term corrosion resistance and salt spray resistance. It can also adhere to chemically coated surfaces such as metal oxides. It exhibits excellent compatibility with epoxy resins, phenolic resins, melamine, acrylic resins, polyurethanes, and silicones. High-temperature baking at 260°C does not affect gloss or color vibrancy. It is suitable for use in coatings, inks, adhesives, and composite molding industries. It can be stored stably at room temperature with various types of polymers without the need for separate packaging.

TYPICAL VALUES

MW(GPC)	235
Effective content	99.5%
Colour, Gardner	>5
Refractive Index	1.41
Specific Gravity	0.95
Viscosity at 25 °C, cPa.s	20

Resin Modification:

Adding MP-321 during the synthesis of resins, plastics, and rubber can significantly improve the overall performance of the resins, including excellent pigment wettability, adhesion, salt spray resistance, and damp heat resistance.

Coatings, Inks, and Adhesives Applications:

In industrial coating applications, pre-crosslinking MP-321 with the formulated film-forming resin and intermediates can also significantly improve coating performance under milder reaction conditions. It provides more stable storage in solvent-free formulations, while high-boiling-point alcohol ether solvents are preferred for applications containing volatile organic solvents.

Recommended addition amount: 0.5-2%

packing: 20kg 塑料桶 , 200kg 铁桶

更详尽的应用参考资料及 MSDS 备索……