Diethanolamine (DEAM)

Diethanolamine Resin, MP, is a macroporous resin functionalized with a diethanolamine end group. It is versatile reagent capable of complexion of a wide variety of organometallic and inorganic metal complexes. When combined with MP-Disopropylethylamine, this combination effectively manages the excess Lewis acid catalyst and byproducts of a variety of reactions including Sakuri and Mukaiayma Aldol.

It is also highly effective in coordinating boronic acids. This ability allows researchers to utilize excess boronic acid coupling reagents to enhance reaction rate and conversion to product. If desired, boronic acids can be coordinated prior to reaction allowing for their further functionalization giving complex boron coupling partners. The use of MP-DEAM again results in simple filtration of unwanted byproducts and excess reagents, significantly simplifying purification of desired biaryl products.

In reductive aminations utilizing Ti(OiPr)₄, aqueous quenching of excess reagent produces a gelatinous mixture of titanium hydroxide and other salts that are difficult to separate with long work-up times involved. MP-DEAM does an amazing job removing excess reagent without the arduous work-up and when combined with other SPE products, simple isolation of desired amines is achieved.

General Reaction



References

Hall, D. G. Angew.Chem., Int. Ed. 1999, 38, 3064-3067.
Arimori, S. Tetrahedron Lett. 2000, 41, 10291-10294.
Thompson, K. A. Chem. Comm. 2000, 2379-2380.
Arimori, S. Tetrahedron Lett. 2002, 43, 507-509.
Gravel, M. J. Comb. Chem, 2002, 2, 228-231
Gravel, M. J. Org. Chem, 2002, 67, 3-15

Ordering Information

MP-Diethanolamine

Loading: 2.5-2.8 mmol/g	10g	SPMP 09-10
	25g	SPMP 09-25
Bead size: 330-1225 microns, 15-50 mesh	100g	SPMP 09-100
(>90% within)	1Kg	SPMP 09-1kg
Diethanolamine-Fine		
Loading: 1.2-1.4 mmol/g	10g	SPMP 23-10
	25g	SPMP 23-25
Bead size: 100-200 mesh	100g	SPMP 23-100
	1Kg	SPMP 23-1kg



OH

OH

Solvent Compatibility

THF DMF NMP DCM DCE MeOH EtOH

For additional information contact info@suprasciences.com or visit www.suprasciences.com