Hydroxide (OH)

Hydroxide Resin, MP, is a highly cross-linked polystyrene resin functionalized with a tetraalkylamonium hydroxy end group. It is a strongly basic anion exchange resin that is capable of both reagent and scavenger endeavors.

The Hydroxide Resin is an exceptional scavenger of both strong and weak acids from reaction and work-up media. Particularly notable is its bulk application in removing ammonium chloride and triethylamine hydrochloride impurities in scaled up processes.

On the reagent side, it has been identified as a competent partner in Diekman and Henry reactions, in addition to ester hydrolysis and trifluroacetamide deprotection.

One particularly useful characteristic is in the hydrolysis of esters. The resulting 'carboxylic acid' is deprotonated resulting in an immobilized carboxylate, allowing for simple separation from aqueous environments. Treatment with TFA then releases the carboxylic acid in high purity, ready for subsequent reactions.

General Reaction



References

Deegan, T. L. *Tetrahedron Lett.* **1997**, *38*, 4973-4976. Havermann, J. *J. Chem. Soc. Perk. Trans*. 1 **1998**, 3127-3130. Kulkarni, B. A. *Chem. Comm.* **1998**, 785-786. Ley, S. *J. Chem. Soc. Perk. Trans*. 1 **2000**, 3645-3654 Katz, S. J. *Tetrahedron Lett.* **2002**, *43*, 557-559. Hon, Y. S. *Tetrahedron.* **2003**, *59*, 493-498.

Solvent Compatibility

THF DMF NMP DCM DCE ACN H₂O

Ordering Information

MP-Hydroxide

Loading: 0.9-1.0 mmol/g	100g	SPMP 30-100
	1 Kg	SPMP 30-1kg
Bead size: 330-1225 microns, 15-50 mesh		

(>90% within)

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



N → OH