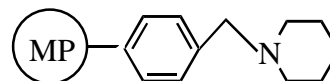


CombiZorb MP-Piperidinomethyl

Structure:



Characterization:

Spherical, macroporous polystyrene/DVB particle; Density: 0.6 g/mL; Particle Size: 30-100 μm ; swelling: 30-50 % in THF or CH_2Cl_2 .

Capacity:

1.7-2.5 mmol/g (determined by uptake titration of chloride)

Application:

Use as catalyst for acylation reactions in place of tertiary amine and for scavenging acids generated from condensation reactions[1].

Typical Conditions:

2 equiv. MP-Piperidinomethyl relative to the acid to be generated. The scavenger is compatible with more common solvents than gel-type polystyrene based analogues, including THF, dichloromethane, DMF and acetonitrile. In general, it is unnecessary to swell the particle to get access to the functional sites.

Application Examples:

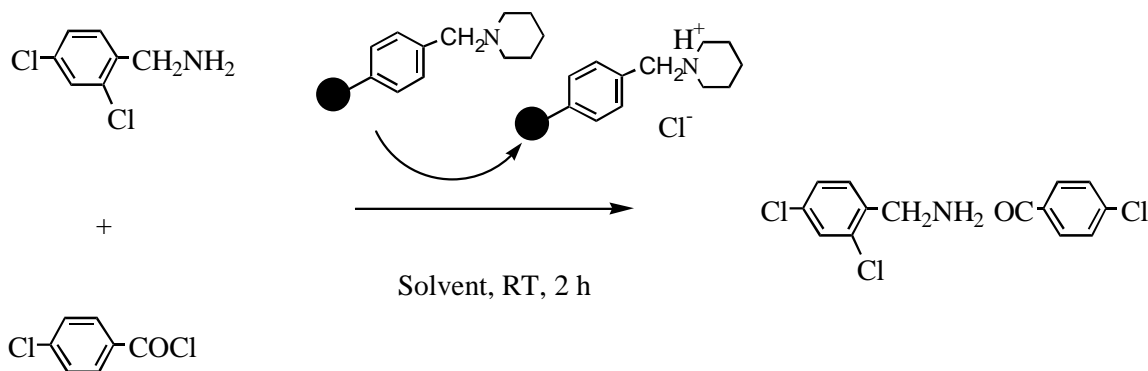
Representative procedure: to a vial containing 0.6 gram of MP-Piperidinomethyl (1 mmol), 0.6 mmol 2,4-dichlorobenzylamine and 2.5 mL acetonitrile, 0.5 mmol of 4-chlorobenzoyl chloride was added under nitrogen. The mixture was magnetically agitated at room temperature for 2 hours. 0.3g MP-Isocyanate (0.3 mmol) was then added and the mixture was agitated for another 1 h at room temperature. The mixture was filtered and the solid was washed with 1 mL MeOH and 1 mL acetonitrile. The corresponding amide was obtained upon evaporation of solvents from the combined filtrate.

Recommended Storage:

Keep cool and dry, 15° to 25°C.

Reference:

1. R. J. Booth and J. C. Hodges J. Am. Chem. Soc. 1997, 119, 4882



Solvent	Yield (%)
dichloromethane	97
acetonitrile	92



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Certificate of Analysis

Product Name **CombiZorb MP-Piperidinomethyl**

Lot Number _____

Functional Groups -CH₂N 

Test	Specification	Result
Appearance	Off-white or light yellow	Pass
Capacity	>1.7 mmol/g	
Swelling in dichloromethane	<50%	
Particle Size	>90% at 20 to 80 µm	Pass
Non-volatile Extractible (by acetonitrile)	<0.5 %	Pass
IR spectroscopy	Consistent with proposed structure	Pass

FOR RESEARCH AND DEVELOPMENT USE ONLY

Certified By _____

Quality Control Date_____