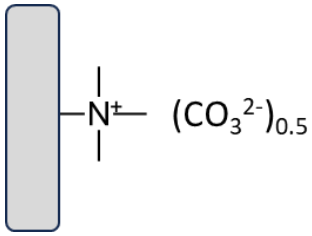
SABIT™ Karbonik

Material overview

SABIT Karbonik is a rigid polymeric resin for use in scavenging reactions. The resin chemistry backbone consists of highly stable DVB-Styrene with positively charged polymeric quaternary amines coordinated to negatively charged carbonate counterions. The mesoporous structure is optimal for both small and oligomeric molecules.

Resin properties

Resin matrix	DVB/Sty
Resin surface chemistry	Q ammonium carbonate
Particle size	400-1200 µm
Porosity	Mesoporous
Capacity per g, approx	2.2 mmol/g
Capacity per ml, approx	0.8 mmol/ml
Resin density, approx	0.38 g/ml
Dry volume	2.6 ml/g
Swelling in water	4.6 ml/g
Swelling in MeOH	4.2 ml/g



Application areas

This polymer-bound base with its new structure offers higher capacities and faster exchange reactions. The easily accessible carbonate ions are bound to quaternary tetramethyl ammonium groups easily accessible on the resin surface. SABIT Karbonik is a resin-bound alternative to tetra-alkylammonium carbonate and can be used to scavenge a variety of acidic molecules such as

- acidic phenols, HOBt
- carboxylic, boronic, trifluoroacetic, hydrochloric acids
- volatile amines, DIPEA or TEA

Further, it can be used as a general base to quench reactions and to neutralize amine hydrochlorides ie free basing. The large particles of SABIT Karbonik are optimal for facilitated handling and in preparative applications.

Representative Procedure

Neutralization of Amine Hydrochloride Salt to the free amine

1. Basic drug hydrochloride salt (1 equiv.) in DCM or MeOH
2. Add SABIT Karbonik (2-5 equivalents), shake gently for 1-2 hours
3. Separate resin filtration or sedimentation
4. Wash resin 2 x with DCM or MeOH.
5. Concentrate the filtrate to give the free base.

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Place your order at: order@redstone-sep.com.

Resin	Grams	Product code
Sabit Karbonik	5	30-02-0005
Sabit Karbonik	10	30-02-0010
Sabit Karbonik	25	30-02-0025
Sabit Karbonik	100	30-02-0100

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