

SiliaBond®  
Specification Sheet

SiliaBond® Guanidine

Product number : R68230B  
Particle size : 40-63 µm  
Pore diameter : 60 Å  
Particle shape : Irregular Silica Gel

## Product description

SiliaBond Guanidine (GUA) is a silica-supported diisopropylguanidine ligand.

It is a very powerful scavenger for the chelating of organic acids in general, especially boronic acids and phenolic acids.

It may also be used as a very strong base. It is sufficiently basic to deprotonate moderately acidic hydrogens, as in the alkylation of amines and phenols (*Williamson ether synthesis*) and the esterification of carboxylic acids using alkyl halides.

## Product specifications

Properties	Specifications	Analysis methods
Particle size distribution (%) (Under 40 µm / Over 63 µm)	≤ 5 / ≤ 5	Sieving
Specific surface area (m <sup>2</sup> /g)	480-550	Brunauer, Emmett and Teller (BET) Analysis
Pore diameter (Å)	55-65	
Pore volume	0.70-0.85	

## Test report

Properties	Specifications	Analysis methods
Nitrogen content (N%)	≥ 3.36	CHNS analyser
Volatile content (% , 110°C)	≤ 4.00	Humidity measurement
Color	Light yellow	Visual test

## Physical properties

Properties	Specifications	Analysis methods
Molecular Loading (mmol/g)	≥ 0.80	Based on nitrogen content
Surface coverage (µmol/m <sup>2</sup> )	≥ 1.75	Based on the loading
End-capping	Yes	-

## Storage conditions and shelf-life

Prolonged storage	Shelf - life
Keep dry	2 years

Recommended & standard conditions: to achieve product's full lifetime we recommend keeping it dry in a cool place (< 8°C) in a tightly closed container. Consult the application note Appn\_SM001-1 to learn more about optimization procedure for SiliaBond products.