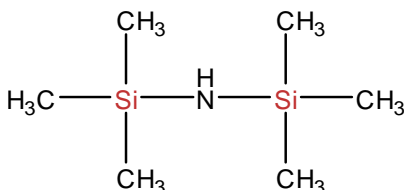




## CHEMICAL NAME

Hexamethyldisilazane; Bis(trimethylsilyl)amine; HMDS; HMDZ

## CHEMICAL STRUCTURE



## INTRODUCTION

SiSiB<sup>®</sup> PC9210 (HMDS) is an extremely versatile and strong silylating agent. It is primarily used for the protection of sensitive functional groups during chemical synthesis.

Trimethylsilyl moiety is a versatile blocking agent employed in chemical synthesis. Introduction of silyl protective groups has following advantages.

- Masking of reactive functional groups.
- Improvement of solubility in polar and or non polar solvent.
- Improved product stability.
- Easy removal of protective groups .
- Additional activation of reactive centres.
- Easy elimination of hydrogen bonds.

One of the advantages of SiSiB<sup>®</sup> PC9210 over chlorosilanes is that no base is needed as a hydrochloric acid acceptor. SiSiB<sup>®</sup> PC9210 produces ammonia which escapes easily from the reaction mixture during silylation.

## APPLICATIONS

SiSiB<sup>®</sup> PC9210 can be used to introduce trimethylsilyl group into organic molecules containing an active hydrogen atom such as alcohols, carboxylic acids, amines etc. The most common industrial application of SiSiB<sup>®</sup> PC9210 is in production of semi synthetic beta lactum antibiotics as ampicillin and cephalixin.

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# SiSiB<sup>®</sup> PC9210 SILAZANE

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The usual procedure is to protect the carboxylic group in the antibiotic with HDMS followed by acylation with the desired acylchloride. Finally, desilylation under mild aqueous conditions gives the desired product.

## TYPICAL PHYSICAL PROPERTIES

CAS No.	999-97-3
EINECS No.	213-668-5
Formula	C <sub>6</sub> H <sub>19</sub> NSi <sub>2</sub>
Molecular Weight	161.4
Boiling Point	125°C
Flash Point	15°C
Ignition point:	325°C
Color and Appearance	Clear colorless liquid
Density <sub>25/25°C</sub>	0.770
Refractive Index	1.407
Purity:	Min 99.0%

## PACKING AND STORAGE

SiSiB<sup>®</sup> PC9210 is supplied in 150Kg steel drum.

In the unopened original container SiSiB<sup>®</sup> PC9210 has a shelf life of one year in a dry and cool place.

## NOTES

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

We specifically disclaim any other express or implied warranty of fitness for a particular purpose or merchantability. We disclaim liability for any incidental or consequential damages.

Please send all technical questions concerning quality and product safety to: silanes@SiSiB.com.

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