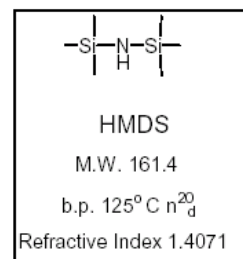


Silanized Glass Vials

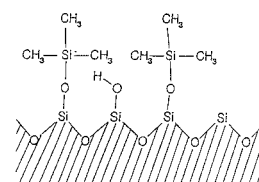
Deactivation Methods

What are they?

- Siliconizing agents and Siliconizing Fluids such as HMDS when used with glass reduce surface tension and resistivity.
- They work by either forming silanol polymers in solution or by reacting directly with polar groups on the object's surface. The silanol polymers formed by reaction with the silanols (Si-OH) on the glass surface.
- Covalent bonds are formed among the hydroxyls on the glass and the silicon from the siliconizing agent.
- These agents work by direct reaction with the silanols on the glass. The silanol bonds formed by any of these reagents are able to withstand autoclaving conditions. Monochlorosilanes, such as TMCS (trimethylchlorosilane) and DMCS, tend to give the most reproducible coatings on glass. HMDS is a very useful agent as it gives a consistent coating under mild reaction conditions. The aim is to react with acidic silanol groups that are responsible for interactions with basic sample components.
- Siliconizing agents can be applied by several methods including immersion, wipe-on treatment, and vapor phase coating.
- Silanized vials are produced by a reactive and stable vapour phase coating.



Physical properties of a typical silanizing reagent.



Glass surface after treatment with TMCS

Why are they used?

- Hydrophobic siliconizing agents prevent losses of basic polar compounds and active bio-molecules on glass surfaces.
- Protein losses on glassware can be significant when working with small amounts of protein. It is very useful for protein chemistry applications because its working solution is prepared in water and does not require dilution in hazardous non-polar organic solvents. Be aware that some proteins are lost on hydrophobic surfaces more readily than on hydrophilic surfaces.
- With vials used for concentration such as the I.5-HRCV shown right the deactivation improves total recovery of polar components.
- With micro-sampling, recovery of active components is improved giving greater accuracy and precision.



Features:-

- Stable silanizing applied to a wide range of glass vial products.



Chromacol Product Guide

Benefits

- Higher total recovery
- Minimised loss of polar analytes

Additional Information

- The silanized vials are produced in clean conditions with packaging in chromatographically inert packaging.

Ordering

Chromacol Part Number	Description	Pack Size
Inserts		
02-MTVGW-S	.2mL Tapered Insert - Clear	1000
03-NV-S	.3mL flat Bottom Insert - Clear	1000
High Recovery Vials		
1.5-HRCV-S	1.5mL Crimp Top Vial - Clear - High Recovery	100/PK
1.5-HRRV-S	1.5mL Snap Cap Vial - Clear - High Recovery	100/PK
1.5-HRSV(A)-S	1.5mL Screw Top Vial - Amber - High Recovery	100/PK
1.5-HRSV-S	1.5mL Screw Top Vial - Clear - High Recovery	100/PK
Vials 12mm x 32mm		
2-CV(A)-S	2mL Crimp Top Vial - Amber Wide Mouth with Write on Patch	100PK/1000
2-CV-S	2mL Crimp Top Vial - Clear with Write on Patch	100/PK/1000
2-RV(A)-S	2mL Snap Cap Vial with Write on Patch - Amber	100/PK /1000
2-RV-S	2mL Snap Cap Vial with Write on Patch - Clear	100/PK /1000
2-SVW(A)-S	2mL Screw Top Vial - Amber Wide Mouth with Write on Patch	100/PK /1000
2-SVW-S	2mL Screw Top Vial - Clear Wide Mouth with Write on Patch	100/PK /1000
Vials 15mm x 45mm		
4-SV-S	4mL screw top vial - clear	100/PK/1000
4-SV(A)-S	4mL screw top vial - amber	100/PK/1000