

SABIT™ PDMA – How to prepare resin beads before use (draft)

Material information

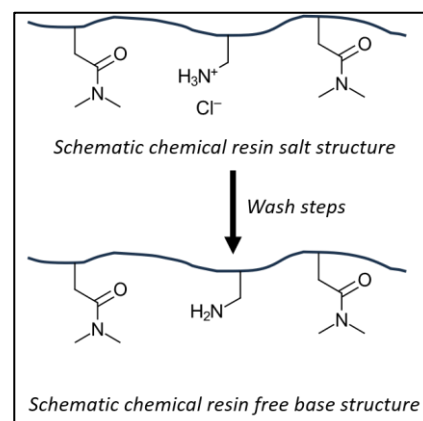
SABIT PDMA are hydrophilic cross-linked polymers based on polydimethylacrylamide with pendant aliphatic amino groups. The dry resin is delivered as a salt for easier handling of the material.

Before use in solid phase synthesis of peptides, oligonucleotides or other organic reactions in water-free solvents, the resin needs to be converted to the free base and then made water free by solvent exchange.



Steps before use – representative Example

1. Weigh 1 g dry resin crystals (some agglomeration)
2. Add ca 20 ml water for efficient swelling of the resin salt
3. Mix or stir or shake, optionally sonicate, and let settle (ca 10-30 mins), then decant excess water.
4. Add ca 10 ml of a 25 % ammonium hydroxide solution and mix properly. Let the ions exchange to free base on resin for at least 30 mins.
5. Wash with water to remove excess ammonia
6. Exchange water with solvent, min 3 times using 20 ml each time. Example of solvents DMF, DMA, NMP, etc
7. Conduct solid phase synthesis steps



Notes and additional information:

The resin has no linker; surface functionality is primary aliphatic amino group. The user has to add linker or conduct other preparations that are required for their particular synthesis.

Resin swelling is higher in water than when present as free base in ammonia, or then in organic solvent.

Do not use a magnetic stirrer to mix the resin suspension as this will grind the resins to fine particles and cause problems in filters or resin contaminations in the final product.

For other questions or inquiries, pls contact us at info@redstone-sep.com