TREVERLITE and TREVERLYST Catalyst

Procedure for Storage of Original Package

This procedure is applicable for all grades of TREVERLITE ion exchange resins, TREVERSORB adsorbents, TREVERCHROM chromatographic resins and TREVERLYST catalyst that are supplied in fully hydrated condition. For dry resin special storage and loading conditions apply. Please consult the CHEMRA technical expert team.

The main purpose of this practical guide is to educate our customers in protection of our products during storage in their warehouse before these are loaded in the columns for use. For potable water, food and pharma grade resins special storage conditions might apply. For more information, please contact our technical experts.

CAUTION

To prevent dehydration of the beads and bacteriological contamination, it is important to ensure that the water of hydration in the beads does not evaporate during storage. This is because in the event of beads drying up they can crack and shatter during subsequent rewetting due to instantaneous expansion of the beads by absorption of moisture. Dry beads expand heavily and might break the equipment they were filled in.

RECOMMENDED STORAGE AND HANDLING CONDITIONS

1. TREVERLITE ion exchange resins, TREVERSORB adsorbents, TREVERCHROM chromatographic resins and TREVERLYST catalyst must be stored in their original packing only.
2. The bags/drums must be stored at a cool, dry place away from direct sunlight or exposure to UV rays and at a temperature below 35°C.
3. Periodically check the condition of original packing and ensure that it is leak-tight and in original sealed condition. Renew damaged bags, if any.
4. When the packing is opened, confirm that the beads have remained moist. If necessary spray with clean demineralised water.
5. Never open and close the packaging of pre-dried beads again. Being hygroscopic the resins will pick up moisture from the environment if they are not properly sealed.
6. Temperatures as low as -20°C have no measurable effect on the resin properties. The gel water inside the resin beads does not freeze because of the high ionic strength inside the resin.
   However, the surface water on the beads and excess moisture in the containers will freeze below 0°C, giving the impression that the resin mass is completely frozen.
7. Frozen resin containers should be handled gently to avoid mechanical shocks and damage of the resin beads.
8. Frozen resin containers should be thawed gradually in a warm room, avoiding thermal shock.

When stored properly TREVERLITE resins, TREVERSORB adsorbents, TREVERCHROM chromatographic resins and TREVERLYST catalyst for industrial application can be easily kept for more than one year.

In the event the storage time exceeds one year it is recommended to check the quality before use. CHEMRA representative can assist the customers for this. However, if the intended application is food/pharmaceutical processing or potable water, then the quality needs to be checked after 6 months of storage.

Operating conditions refer to the use of the product under normal operating conditions. They are based on experience in industrial applications. However, additional data are needed to calculate the resin volumes for larger plants. For more questions please contact our technical experts.

Governmental regulations vary from country to country. Please seek advice from your local CHEMRA representative in order to determine the best catalyst choice and operating conditions.

Safety

Please note, that polymeric resins can swell significantly between the aqueous and pure solvent phases or when rewetted. Care should be taken. Glass columns and even steel columns can break. Wear glasses when using resin systems. To avoid high pressure build up, an operation in counter current or up-flow through the polymer bed shall be considered.

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