Disinfection of resin beds using peracetic acid

Treatment recommended for resins contaminated with bacteria

Caution

- Concentrated peracetic acid is a hazardous chemical and should be handled with extreme care. Consult supplier for precautions. The ion exchange column should be **vented**, as gases may escape.

Important preliminary notes

- The procedure below applies for clean resins. Concentration, volume and contact time are applicable only for disinfection of the resin.
- If the resin is loaded with organics e.g. from sugar juices, extreme care must be applied because peracetic acid will oxidise the adsorbed organics in an exothermic, possibly explosive reaction.
- If strong organic fouling is suspected, the resin should be submitted to an alkaline brine treatment before disinfection.
- As peracetic acid is an oxidant, the treatment should not be carried out as a periodic routine, but only when the presence of bacteria has been confirmed.

Procedure for treatment

- Resin must be converted to exhausted form. You can use dilute NaOH or NaCl for cation resins or dilute HCl or H$_2$SO$_4$ or NaCl for anion resins.
- Clean resin by backwashing and air scour to loosen accumulation of germs and remove contaminants (silt and debris).
- Drain column completely.
- Introduce one bedvolume of peracetic acid at 0.2 percent concentration from the bottom of the column.
- Leave in contact for one hour.
- Rinse thoroughly.
- Regenerate resin bed.

\[PDF\] This information is available as a practical guide for distribution to customers.

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