

BetzDearborn* IEC6

- Cleans organic material and silt from ion exchange resins.
- Can be used on cation or anion resins.
- Easy to apply liquid.

description and use

BetzDearborn IEC6 is a specially formulated blend of organic surfactants, designed to solubilise surface coatings of organics, as well as loosen silt and other insolubles trapped on the resin bead. The use of BetzDearborn IEC6 prior to regeneration allows better contact of regenerant with the resin bead and improves organic removal, which increases regeneration efficiency. BetzDearborn IEC6 used in an out-of-service cleaning increases the efficiency of the cleaning and the amount of surface material removed from the resin.

typical applications

Ion exchange resins are subject to fouling by inorganic and organic compounds present, to some degree, in all waters. Oil fouling coats the resin, effectively blocking ion exchange sites. The resin becomes clumped, causing increased pressure drop across the bed, loss of resin during backwash, channeling and premature breakthrough.

Organic compounds and normally occurring inorganic materials, such as nitrates, contained in the water serve as nutrients, which support microbiological growth. If the growth occurs in a cation unit preceding a strong-base anion, waste organics generated by the decay of microbes and organisms fouls the anion resin, reducing capacity and efficiency.

BetzDearborn IEC6 can be added to the backwash water prior to regeneration on a regular basis for maintenance and control of the build up of inorganics,

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silt, oil, and microbiological materials. This procedure aids in maintaining bed performance at peak efficiency.

The frequency and method of cleaning is dependent on the severity of the contamination problem.

If the bed is severely fouled, indicated by drastically reduced capacity and run lengths, an out-of-service cleaning is required to regain good resin efficiency. Air lancing or air percolation through the bottom distributor during product application provides more effective contact and also aids in breaking up any buildup of contaminants in the bed.

treatment and feeding requirements

Feed Point

May be applied with backwash prior to regeneration or added directly to the vessel for out-of-service use.

Feedrate

In Service : Add BetzDearborn IEC6 to obtain 100 - 300 ppm in the backwash. Usage depends on the length of time between out-of-service cleanings.

Out of Service : Add BetzDearborn IEC6 to the unit to obtain a concentration of 350 ppm in the water when the bed is covered with 4-6 in. of water. (Use 49°C water if fouling is severe, depending upon temperature limits for the resin being treated.)

Dilution

May be fed neat (undiluted) or diluted with water to a convenient strength.

Equipment

Mild Steel, stainless steel and PVC, polyethylene,

polypropylene, and Kynar plastics are satisfactory for pumps, piping and tanks for use with BetzDearborn IEC6. An air lance should be used to agitate the bed during BetzDearborn IEC6 servicing off-line if bed percolation is not possible.

packaging information

BetzDearborn IEC6 is a liquid blend and is available in a wide variety of customised containers and delivery

methods. Contact your local SUEZ representative at www.suezwatertechnologies.com.

safety precautions

A Material Safety Data Sheet containing detailed information about this product is available on request.

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