

PermaTreat[®] PC-510

Silica Antifoulant for Use in Reverse Osmosis Systems

PRODUCT BENEFITS

- Effective silica and calcium salt antifoulant in all water types
- Suitable for use with polyamide thin film composite and cellulose acetate membranes
- Liquid product, safe and easy to handle
- Enables recovery rates to be maximised
- Compatible with all membrane types
- Effective over a wide pH range



PermaCare
International

PRINCIPAL USES

PermaTreat PC-510 has been developed specifically for use with high silica waters and is a synergistic blend of threshold antiscalants and dispersants.

Precipitation of scale on RO membranes will reduce system performance and lead to premature membrane replacement. Buildup of scale and deposits on RO membrane leads to poor permeate quality, low permeate production, unscheduled downtime, increased water consumption and increased energy costs.

PermaTreat PC-510 allows plant operation with concentrate silica levels up to 230 mg/l at pH 7.5 and 30°C. PermaTreat PC-510 is not deactivated by the presence of iron or manganese and is an effective scale inhibitor against all insoluble calcium salts.

GENERAL DESCRIPTION

For typical chemical and physical properties, refer to the PermaTreat PC-510 Material Safety Data Sheet.

TREATMENT AND DOSAGE REQUIREMENTS

PermaTreat PC-510 prevents silica fouling by a combination of anti-precipitation, anti-agglomeration and dispersancy processes.

The recommended feedwater dose rate is 1 mg/l of PermaTreat PC-510 for each 6 – 10 mg/l of total silica, depending on the operating temperature and pH. With high silica concentrates (180 – 230 mg/l), it is necessary for the correct level of PermaTreat PC-510 to be present in the concentrate since silica fouled membranes are difficult to clean.

When both dissolved and colloidal silica is present, silica fouling can be difficult to predict because of the complexity of the reaction chemistry. Preventing the formation of substrate material such as insoluble calcium and iron salts is important in eliminating silica fouling. It is strongly recommended that effective auto-flushing devices be used with high silica waters.

(Continued on Reverse Side)

HANDLING

Read the label and Material Safety Data Sheet for complete handling information before using this product.

REMARKS

For assistance and information, such as product availability and packaging, contact your nearest Ondeo Nalco representative or office:

Naperville, Illinois: 630-305-1000

Leiden, The Netherlands: 31-71-524-1100

São Paulo, Brazil: 55-11-5644-6500

Singapore: 65-861-4011

For more news about Ondeo Nalco and PermaCare® programmes, visit our website at www.ondeo-nalco.com.