



SERFILCO

TR-200
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Supersedes T-380A

TECHNICAL BULLETIN

DEIONIZED WATER : DIW INDICATOR MIXED BED RESIN

DIW is a high purity and fully regenerated mixture of Cation and Anion exchange resins with a color indicator to show when the deionizing capacity of the resin mixture has been used. DIW is recommended for producing water of low total dissolved solids, LOW CO_2 and LOW SILICA, and where a visual end point is desired.

FUNCTIONAL GROUPS: $\text{SO}_3\text{-H}^+$ (HYDROGEN FORM SULFONATED POLYSTYRENE COPOLYMER).

$\text{R}_4\text{N}^+\text{OH}$ (HYDROXYL FORM STRONG BASE ALKYL QUATERNARY AMMONIUM POLYSTYRENE COPOLYMER).

PHYSICAL APPEARANCE: BEADS.

NOMINAL MESH SIZE: 16-50 MESH.

INFLUENT pH RANGE: 0-14

MAXIMUM OPERATING TEMPERATURE: APPROX. 100°C (212°F) FOR NON-REGENERATIVE
OR
APPROX. 60°C (140°F) FOR REGENERATIVE BEDS.

MOISTURE CONTENT: 50-60%

OPERATING RATE: 5-7 GPM/SQ.FT. (CONSIDERABLY HIGHER RATES MAY BE USED WHEN EMPLOYED AS A POLISHING BED TO TREAT WATER OF RELATIVELY HIGH PURITY).

COLOR INDICATOR: DARK PURPLE TO LIGHT GOLDEN BROWN -- AS RESIN DEIONIZING CAPACITY IS USED, THE RESIN MIXTURE WILL CHANGE WITH THE COLOR FRONT GRADUALLY MOVING DOWN THE COLUMN.

NOTE: COLOR FRONT AT CONDUCTIVITY BREAKTHROUGH IS APPROXIMATELY 25% TO 30% FROM THE BOTTOM OF THE BED.

PURITY OF DEIONIZED WATER: DIW WILL PRODUCE ULTRA-HIGH PURITY WATER OF GREATER THAN 10 MEGOHM RESISTANCE.

TOTAL CAPACITIES: CATION EXCHANGER : 1.9 MEQ/ML.
ANION EXCHANGER : 1.4 MEQ/ML.

COLUMN CAPACITY: 0.58 MEQ/ML. (12.7 KGR/CU.FT.) MIN.; TO ELECTROLYTE BREAKTHROUGH WHEN FEEDING WITH 500 PPM (10 MEQ/L = 29 GRAINS/U.S. GAL.) SODIUM CHLORIDE SOLUTION.

PACKAGING: THE APPROXIMATE NET SHIPPING WEIGHT IS 45 LBS. PER CU.FT. SHIPMENT WILL BE MADE IN 5 CU.FT. FOOT FIBER DRUMS WITH THE RESIN SEALED WITHIN A POLYETHYLENE LINER, UNLESS OTHERWISE SPECIFIED.

NOTE: OTHER TYPES AND GRADES OF SERFILCO ION EXCHANGE RESINS ARE AVAILABLE.
WE SHALL BE PLEASED TO ADVISE YOU ON YOUR SPECIFIC REQUIREMENTS.

(OVER)

PRECIOUS METAL RECOVERY RESIN: PMR

STRONG BASE ANION EXCHANGE RESINS FOR PRECIOUS METAL RECOVERY BY STANDARD METHODS

These resins are used for the ion exchange treatment of plating rinse water to recover Gold loss due to drag out.

We recommend the PMR A, for Acid Cyanide (about pH 4), and the PMR C, for Alkaline Cyanide solutions (about pH 7-9).

When fully loaded with Gold (or other precious metals), can hold 70-100 Troy ounces per cubic foot, under optimum conditions. It must be noted that other based metals such as Copper, Nickel, Cobalt, etc., as well as Chloride and Cyanide may compete for active sites, thereby reducing the capacity of this resin for Gold.

<u>CHARACTERISTICS</u>	<u>PMR A</u>	<u>PMR C</u>
Particle Size (U.S. Mesh)	-20 + 50	16-50
**Ionic Form	Salt	Salt
Shipping Weight	48-52	43-46
Total Capacity	29 KGR/Cu.Ft. 1300 MEQ/L	1.0 MEQ/ML
Max. Operating Temperature	100°C	60°C
Max. Flow Rate	5 GPM/Sq.Ft.	5 GPM/Sq.Ft.

**Chiefly Sulfate, some Chloride.

The data included herein, are based on test information obtained by Serfilco. These data are believed to be reliable but do not imply any warranty or performance guarantee. We recommend that the user determine performance by testing on his own processing equipment. We assume no liability or responsibility for patent infringement resulting from the use of this product.