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ELUGEN CARTRIDGE (EGC) KOH, NaOH, LIOH & MSA QUICKSTART

1. INSTALLATION

1.1. Plumbing (Figure 1)

- Remove the EGC from the box (KOH, P/N 058900, NaOH, P/N 058908 or LiOH, P/N 058906 or MSA, P/N 058902).
- b. Save the box and foam for future storage.
- c. Place the EGC on a flat surface in front of the Eluent Generator (EG) with the Electrolysis Chamber and EGC INLET and OUTLET fittings facing up.
- d. Locate the black tubing assembly included with the EGC.
- e. Connect the PUMP OUT side of the black tubing assembly to the pump.
- f. Connect the other end, labeled "EGC-IN" to the INLET port of the EGC.
- g. Attach backpressure restrictor tubing (P/N 053765), supplied with the EG ship kit, to the EGC OUTLET port. This tubing will produce 2000 psi at a flow rate of 1 mL/min.
- h. Divert the free end of the backpressure restrictor tubing to waste.

1.2. Preparation (Figure 2)

- a. Invert the EGC with the EG Chamber downward.
- b. Shake the EGC vigorously.
- c. Tap the EG chamber with the palm of your hand 10 to 15 times.
- d. Watch to ensure all bubbles trapped in the EG chamber are dislodged.

NOTE: Be sure to repeat this process each time the EGC Chamber is turned upward.

- e. Position the EGC in the EG Module with the EG chamber downward by positioning the EGC chamber just below the shelf and the reservoir just above the shelf.
- f. Slide the cartridge into the opening in the shelf.
- g. Unscrew the gas vent port plug.
- h. Screw the Luer adaptor provided into the vent hole.
- i. If using an EG40, EG50 or ICS-3000 EG, connect the EluGen vent to the module vent line.

WARNING: Failure to remove the gas vent port plug and properly connect the vent tubing can lead to excessive pressure build-up in the Reservoir Bottle and create an unsafe operating condition.

1.3. Conditioning

- a. Connect the EGC electrical connector to the "EGC Device Power" connection in the EG module.
- b. Set the flow rate to 1 mL/min.
- c. Turn On the pump from the pump front panel, PeakNet, or Chromeleon.
- d. Set the eluent concentration to 50 mM.
- e. Operate the cartridge for 30 minutes, then shut down the EGC and pump.
- f. Remove the backpressure restrictor tubing from the EGC OUTLET port.





READ THIS FIRST



Figure 2 EGC Drawing with EGC

2. CONTINOUSLY REGENERATING TRAP COLUMN (CR-TC)

NOTE: For anion exchange applications use CR-ATC, P/N 060477. For cation exchange applications use CR-CTC II, P/N 066262.

2.1. Installation before Hydration (Figure 3)

NOTE 1: Do not loosen or remove the fittings with the electrical connections (fittings with wires attached).

NOTE 2: When making final pluming connections all fittings should be finger tight plus 1/4 turn.

- a. Turn off power to the pump, EGC, CR-TC, and the suppressor (SRS/AES).
- b. Disconnect the following:
 - 1. Trap columns (ATC or CTC) installed between the EG and the Degas Assembly.
 - 2. Trap columns (ATC or CTC) installed between the pump and the EG module.
- c. Remove the plugs on the CR-TC ports before installation.
- d. Find the tubing with the red label on one end and a white label on the other end (supplied with the EGC).
- e. Connect the end with the white label to the Eluent Out port of the EGC.
- f. Connect the end with the red label to the Eluent In port of the CR-TC.
- g. Connect the tubing with the orange label to the Regen In port of the CR-TC.
- h. Connect the tubing with the blue label to the blue Regen Out port of the CR-TC.
- i. Connect the tubing with the yellow label to the yellow Eluent Out port of the CR-TC.
- j. Tightened all fittings.

2.2. Hydration (Figure 3)

NOTE: The CR-TC should be hydrated after first installation before operation, or after long-term storage. This process ensures the CR-TC resin and membranes are fully hydrated and ready for operation.

- a. Disconnect the ELUENT OUT line protruding from the Degas Assembly at the end labeled TO INJECTION VALVE IN-P.
- b. Connect this end to a 10-32 to 1/4-28 coupler (P/N 042806).
- c. Connect the free end of the tubing, labeled TO SRS/AES REGEN OUT, to the 1/4-28 end of the coupler.
- d. Ensure that the current to the EGC cartridge and suppressor are turned off.
- e. From the pump front panel, turn on the pump flow rate to hydrate the CR-TC by pumping DI water at the flow rate of your 4-mm, 3-mm or 2-mm application for at least 10 minutes.
- f. Disconnect the coupler and complete the CR-TC installation by following the steps in Section 3.



Figure 3 CR-TC Plumbing Diagram for Hydration

Connect to the EGC Cartridge

OUTLET port



aligning the hole on the CR-TC back plate with the ball stud on the mounting plate and pushing the CR-TC firmly onto the mounting ball stud. The CR-TC will click into place when properly installed.

4. CR-TC PLUMBING SCHEMATIC FOR EG



REGEN IN

Connect to the EGC Cartridge

OUTLET port

Pre-plumbed to Degas Assembly REGEN IN port

TO CR-TC

ELUENT IN

(red)

WASTE

GAS SEPAR ATO

SERVICE

CHASE

TO CR-TO

REGEN OUT

(blue

Figure 4

CR-TC Plumbing Diagram for

Installation and Equilibration

VIEWING PORT

TUBE HOLDER

EGC

OUT

Connect to ELUENT IN port

CR-TC

TO CR-TO

(yellow)

TO CR-TC

REGEN IN

(orange)