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Chloride Ion Tests With Sea Water

A: Purpose-

To find out if places that had limited fresh water, , like off-shore oil rigs, could use salt water with our Chlor*rid product and get a low chloride residual ion concentration.

B: Experiment-

1. Place Q-Panel in 5% Muriatic solution for 10 min.
2. Remove panel and let dry -
3. Rinse panel with selected solution by placing solution in a squeeze bottle and squirting solution over panel about 3 times on each side
 - A. Rinse solution 1 was 100% sea water
 - B. Rinse solution 2 was 100:1 mixture of sea water to Chlor*rid
 - C. Rinse solution 3 was 50:1 mixture of sea water to Chlor*rid
 - D. Rinse solution 4 was 10:1 mixture of sea water to Chlor*rid
4. Let panel dry completely after rinse before proceeding
5. With equipment provided in S.C.A.T. Kit and a bag of cotton balls do as follows-
 - A. Remove 2 cotton balls with tweezers
 - B. in provided 100ml beaker put 25ml of distilled water
 - C. Using tweezers wet one cotton ball and squeeze out
 - D. Sub cotton ball over rinsed panel using tweezers
 - E. Rinse cotton ball in water
 - F. Repeat steps C, D, & E with same cotton ball
 - G. With 2nd cotton ball remove excess liquid from panel and rinse cotton ball in beaker
 - H. Place Q-Tab titrator in beaker and wait for results
 - I. Compare results to Q-Tab chart

C: Results of Chlor*rid & Sea Water Tests

No rinse- Cl Ion Concentration- 45ppm
Rinse with distilled water- Cl Ion Concentration- 10ppm
Rinse with 100% Sea Water- Cl Ion Concentration- 25ppm
Rinse with 100:1 concentration- Cl Ion Concentration- 10ppm
Rinse with 50:1 concentration- Cl Ion Concentration- 5ppm
Rinse with 10:1 concentration- Cl Ion Concentration- 5ppm

D: Conclusion-

With a 100:1 concentration you can considerably lower the Chloride ion concentration and with higher concentrations of CHLOR*RID you can lower the concentrations even more, but there probably isn't a chance of getting a 0 ppm reading.