Making Sodium Chloride

(Rarely done)

Purpose:

Redox or Reactivity

Required Materials:

Sodium Metal Chlorine Gas 6 Liter Vycor* Glass Erlenmeyer Flask

Fume Hood Poly-vinyl Tubing Rubber Stopper Sand

* Heat Resistant to 2200° F

Procedure:

Place a 6 Liter with a layer of wet sand covering the bottom of the flask. Add Chlorine gas until the color inside the flask turns yellowish-green, put the stopper on the flask. Unstopper the flask, and add a small chunk of Sodium metal to the flask.

Reaction:

$$2Na + Cl_2 \rightarrow 2NaCl$$

Waste:

After the reaction has returned to room temperature, wash the salt from the flask with distilled water and take from the fume hood and place in a labeled solid container in the waste laboratory to be shipped away.

