

# ABCO 664 Dry Acid Salts

ABCO Products of Sacramento

## Primary Usage

ABCO 664 Dry Acid Salts is an Acid Pickling and activating agent for metals.

## Application

The dry acid salts are mixed with water at concentrations of 6 oz. to 2 lbs. per gallon of water. The concentration for steel acid dipping ranges from 12 oz. per gallon to 16 oz. per gallon, the time from 30 seconds to 2 minutes, room temperature. The concentration used for copper ranges from 8 to 16 oz. per gallon of water with the time of 30 seconds at room temperature. Activating passive nickel requires 1-2 lbs per gal. of water, room temperature, 2 min. 6 to 9 volts cathodic.

## Equipment

Tanks should be lined with PVC, polyethylene, or koroseal

## Chemical Composition

Sodium fluoride & Ammonium bifluoride

## Performance Data

ABCO 664 is a blend of acid salts, activators and surfactants. ABCO 664 can be used to replace liquid acids for many operations in the metal finishing industry. ABCO 664 can be used as activating solutions for iron, steel, copper or brass. The 664 solutions maintain a strong level of acidity with definite advantages over liquid acids.

## Analytical Procedures

Pipette a 5 ml sample into a 250 mL beaker, and add 75-100 mL distilled water. Add 2-3 mL methyl orange indicator. While stirring, titrate with 0.1 N NaOH to a yellow end point. Calculations:  $\text{Oz/gal Dry Acid Salts 664} = (\text{mL NaOH titrated}) (N) (2.174)$

**Caution: ABCO 664 contains fluoride compounds. Avoid breathing or direct contact with salts. Use protective equipment when handling.**