

#### Product Bulletin

Product Name: Bernite 44 Product Code: 2810022 Revision Date: December 21, 2023

# Bernite 44

Bernite 44 will quickly and effectively dissolve flux residues and heat scale on both ferrous and nonferrous metals. It will dissolve in a matter of minutes the glasslike flux buildup normally found after brazing or soldering and will permit effective part cleaning right on the production line. Bernite 44 will eliminate the problems of using strong acids or the expense and difficulties of using abrasive processes. In addition, Bernite 44 will also remove rust, mill and heat scale. Bernite 44 was developed to remove more oxide from ferrous metal than the traditional Bernite 45.

### Features & Benefits

Fast acting	Higher productivity
Inhibited	Controlled action, less reject
	potential; higher productivity

## **Operating Conditions**

Bernite 44 should be heated for maximum effectiveness. This may be accomplished in one of two ways. The more effective method is to add Bernite 44 to the quench water where the heat of the brazed metal will maintain adequate temperature. This compound may also be added to a water solution in a heated tank and used away from the brazing area when immersion in the guench solution is impractical or when the parts have cooled. Note: It is best to add Bernite 44 to cool water then heat to the desired working temperature.

#### **Application**

Bernite 44 is supplied as a dry powder and is prepared by adding to water in the ratio of 10 ounces to the gallon at a temperature of 165°F to 180°F. When used as a post brazing quench bath it is sometimes advisable to start with a heated solution so that the first pieces processed will gain the full effect of the chemical action. The heat of the brazed parts will then maintain adequate bath temperature. Regardless of method of application, a stainless steel (316), polyethylene container or otherwise lined tank should be used. Immersion in this solution will vary from one to three minutes or longer depending upon the amount and accessibility of the flux and heat scale residues. There are no changes in critical dimensions even after a few hour's immersion. Periodic additions of Bernite 44 will maintain the solution at optimum strength (pH 0.5 to 2.5). The amounts of these additions will depend upon the total amount of parts and the volume of solution used. The guench solution should be changed daily or when it has become contaminated by the flux or other residues. On occasion some steels may rust over time. This can be eliminated by dipping the metal into a solution of Bernite 136, rust inhibiting compound.

Surface Cleaners



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## **Caution**

In that Bernite 44 is a complex of add salts one should avoid breathing the dry dust which may cause irritation of the nose, throat and skin. It is also suggested that rubber gloves and aprons be worn.

USE ADEQUATE EXHAUST SYSTEMS FOR PROPER VENTILATION.

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**Metal Finishing** 

