



Better Chemistry. **Better Business.**

### Neutral Salt BS

**Product Code: 2282000**  
**Revised Date: 04/24/2006**

### Neutral Salt BS

Melting Point: 1200°F.

Weight: 100 lbs/cu.ft.

Operating Range: 1300-1700°F.\*

#### DESCRIPTION

**Neutral Salt BS** is a chemically balanced mixture of chlorides and an organic rectifier designed to operate at a specific range of operating temperatures and be self-rectifying. All chemicals incorporated into the formulation are technical grade to insure a high purity, high grade, trouble-free salt mixture. Any solidified salts remaining on the work after heat treatment, are readily soluble and easily removed from the work, in particular, those which have been oil quenched.

**Neutral Salt BS** is used as a molten salt bath for a heat transfer medium in the heat treatment of medium or high carbon steel and low alloy steels. It can also be used for reheating carburized steels and annealing. \*For short periods of time, **Neutral Salt BS** can be used at 1700°F but not for continuous operation. After using at this temperature, it should be lowered to a maximum of 1600°F. **Neutral Salt BS** is a neutral salt mixture with an organic rectifier incorporated into it and when the salt bath is maintained neutral by frequent additions of new **Neutral Salt BS** salts to the production salt bath to replenish dragout, it will neither carburize or decarburize. Chemical testing kits and chemical testing procedures are available for testing the neutrality of the Neutral BS salt bath.

#### CHEMICAL CONTROL REQUIREMENTS

Chemicals and chemical compounds should not be introduced into the Neutral BS salt bath such as nitrates, cyanides, cleaning compounds and oils. Contaminants will not only change the neutrality of the salt bath, but result in ruining the bath, necessitating dumping and starting up a new one.

Additions of new **Neutral Salt BS** to the production salt bath during continuous operation is usually sufficient to maintain the neutrality because of the organic rectifier incorporated into the **Neutral Salt BS** formulation. If, however, the dragout is low, resulting in small amounts of additions of new salt, this would not totally take care of the rectification of the Neutral BS salt bath. Under these circumstances, some of the salt bath should be bailed out and new salt added or a separate quantity of rectifier could be furnished for addition to the production salt bath.



## Product Bulletin

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**NOTE:** When an entirely new salt bath is made up with **Neutral Salt BS** it is important that the bath be run for several hours at temperature for the bath to stabilize before using the bath for production heat treatment. This allows for the excess organic rectifier to dissipate.

### EQUIPMENT REQUIRED

Equipment for the Neutral BS salt bath should be externally heated or immersed or submerged electrode type. The electrode type use ceramic pots. The externally heated types use either mild steel or nickel alloy pots.

### WARRANTY

THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.