



## Product Bulletin

Better Chemistry. **Better Business.**

### Quick Cure 275

**Product Code: 2281002**  
**Revised Date: 9/16/2015**

### Quick Cure 275 Curing Salts For Extruded Rubber Products

Melting Point:.....275°F

Temperature Range\*:.....315-650°F

\*Stable at temperatures up to.....1100°F

Density:.....116 lb./cu.ft.

Specific Heat.....0.37 calories / gram / °C

.....168 calories / pound / °C

.....1.5 BRU / pound / °C

.....0.833 BTU / pound / °F

### **DESCRIPTION**

**Quick Cure 275** is a high purity, eutectic mixture of nitrate and nitrite salts, formulated specifically for curing extruded rubber profiles at the lowest possible temperature ranges. It is used as a molten liquid salt bath and is especially effective for curing silicone profiles and sponge rubber in the 325-475°F. range and can also be used to cure conventional rubber profiles at higher temperatures (over 400°F). Because it is a high purity mixture with a low, sharp melting point it is very fluid at any operating temperature. There are a number of important reasons for curing rubber with **Quick Cure 275**:

It is chemically stable over its wide operating temperature range.

The free flowing characteristics of the salt assure virtually no lumping or caking problems.

It can be used with wide operating temperature variations - 315-650°F.

The salt bath, when heated, maintains its viscosity at operating temperatures.

Rubber profiles, when immersed in the **Quick Cure 275** salt bath, will retain their shape, without sagging or distortion, with uniform surface cure, minimizing scrap.



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All chemicals used in **Quick Cure 275** are water-soluble and do not form any insolubles. Therefore, the solidified salt is easily removed from the surface in a hot water spray rinsing station at the end of the trough just after emerging from the salt trough.

Chemicals incorporated in the formulation are domestic, high purity, high-grade, trouble-free mixtures, assuring continuous high throughput without excessive amounts of scum, foam or sludge buildup and insuring a clear salt solution.

### **APPLICATIONS**

Used as a continuous curing heat transfer liquid salt bath for extruded rubber profiles, hoses, tubing, cable covering, in not only conventional rubber but also for various silicone and sponge rubber formulations.

### **CONTROL REQUIREMENTS**

Quick Cure salt baths are chemically stable and it is necessary only to replace the dragout with new Quick Cure. Removal of organic materials from the profile surface prior to salt curing will allow easier rinsing of the salt at the end of the curing operation and minimize dragout.

## **II. TEMPERING, AUSTEMPERING, ISOTHERMAL QUENCHING**

Melting Point: 275°F

Weight: 116 lbs./cu.ft.

Operating Range: 300-1000°F.

### **DESCRIPTION**

**Quick Cure 275** is a eutectic mixture of nitrate and nitrite salts formulated for a specific range of operating temperatures. It is basically used as a molten heat transfer or quenching salt bath. More rapid quenching of the parts can be obtained by agitation of the salt bath or by the additions of small amounts of water. Salt bath furnaces area available which are equipped to add water in the required quantities and at periodic intervals.



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**Quick Cure 275**, because it is a eutectic mixture with a low, sharp melting point, is very fluid at the operating temperatures. Its cooling rates are comparable to the regular type quenching oils used for martempering, etc. There are, however, a number of important advantages in using **Quick Cure 275** as a quenching medium:

**Quick Cure 275** is chemically stable over its wide operating range of temperatures.

It is only necessary to replace that which is lost through dragout.

**Quick Cure 275** operates at a wide range of temperatures - - 300 to 1000°F.

The salt bath, when heated, maintains its viscosity over temperature range with very little change.

The parts, when immersed in the **Quick Cure 275** salt bath, will attain the temperature of the bath faster than in oil.

All chemicals used in **Quick Cure 275** are water-soluble and do not form any insoluble ones. Therefore, the solidified salt is easily removed from the work in hot water.

Chemicals incorporated into the formulation are technical grade to insure a high purity, high grade, trouble free mixture.

### USES

Drawing of tempering hardened steels.  
Martempering, Austempering, Modified Martempering and Austempering and Isothermal Quenching.

### CAUTION

May cause skin irritation. Do not get in eyes. In case of contact with skin or eyes, flush freely with water. For eyes, get medical attention.

**III. Quick Cure 275** is a heat transfer salt used for the heat treating of steel.

Melting Point: .....275°F  
Weight .....116 pound/cu.ft.  
Operating Range .....315°F - 1100°F



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### DESCRIPTION

**Quick Cure 275** is a mechanical mixture of nitrate and nitrite salts formulated for a specific range of operating temperatures. It meets the requirements of MIL-S-10699B Class I.

### USES

1. Drawing or tempering hardened steels
2. Heat treatments of beryllium alloys
3. Blueing Steels (600-700°F)
4. Martempering
5. Austempering

### CONTROL REQUIREMENTS

It is not usually necessary to control the **Quick Cure 275** salt bath chemically as the bath is chemically stable and it is necessary only to replace the dragout with the new **Quick Cure 275**. When the salt bath is used for tempering steels or heat treating beryllium alloys, replenishment of dragout is all that is necessary.

Do not allow sodium cyanide or carburizing salts to be introduced into the **Quick Salt 275** bath as a violent reaction would occur or an explosion. Also do not get any organic materials into the salt bath.

### EQUIPMENT REQUIRED

Standard salt bath pot furnaces are available which are heated either electronically, or by gas or oil. Cast, pressed steel, welded steel or ceramic pots can be used. Ceramic pots are used only with immersion electric heaters.

### 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.