

## **Bacon Industries' FREEZE-PAKS**



### **B.I. solves production problems with premixed frozen adhesives**

Bacon Industries supplies a complete line of premixed frozen adhesives, sealants and potting compounds known as FREEZE-PAKS. In a special freezing process, reactive compounds are mixed, degassed and packaged under carefully controlled process conditions. None of the desirable properties of the materials are affected by this unique process. All packaged materials are subjected to strict quality control laboratory tests to assure the highest quality.

Since the FREEZE-PAKS are delivered in ready-to-use syringes or capsules complete with batch identification, traceability is assured and periodic retesting for quality is a simple matter.

Bacon Industries' FREEZE-PAKS assure quality, save expensive production time, increase in-plant safety and eliminate most difficult material handling problems.

Bacon Industries' FREEZE-PAKS are supplied in syringes and capsules ranging in size from 1 c.c. upwards. This protective packaging not only is the handy dispenser from a drop to a continuous flow, but protects the user against personal contact from many of the irritating amine curing agents used in epoxy resin formulations.

Increased production naturally follows from the use of B.I. FREEZE-PAKS. There is no on-the-job messy mixing or time consuming clean-up. The special custom package assures easy application, even in confined spaces.

B.I. FREEZE-PAKS are easily shipped in special insulated cartons and are stored at -40°F, or colder, in low-cost mechanical freezers.

## **Certain Quality**

The use of Bacon Industries' FREEZE-PAKS assures that the epoxy system used in your production is mixed and weighed correctly.

Bacon Industries assigns a laboratory specification to each FREEZE-PAK material that we manufacture. Vital properties including pot life, strength and hardness are tested during production and again after the batch is packaged and frozen to ensure that it complies completely with the specific material specification.

FREEZE-PAKS are manufactured in batch quantities under controlled conditions so that all containers are of identical composition. Each container is marked with a batch number and date of manufacture assuring complete traceability. Therefore, B.I. FREEZE-PAKS assure uniform quality and predictable performance.

Testing in our laboratories and in our customers' laboratories indicates that not only does our proprietary premixing and freezing process have no detrimental effects on most systems, but that frequently the handling properties are improved and the work life, in small containers, is extended.

## **Safety**

The use of B.I. FREEZE-PAKS virtually eliminates dermatitis. Production workers need no longer risk skin contact with irritating curing agents, including the highly sensitizing amines, which occurs during the bulk mixing of old fashioned two-part systems. The greatest potential exposure to the individual is during the weighing and mixing operation when the irritants are in open containers.

With B.I. FREEZE-PAKS, the operator handles only the FREEZE-PAK package which is designed to give personal protection against all of these skin irritants. No longer must production workers risk dangerous contact with these irritants. This is becoming increasingly important to production and safety engineers because of the many new federal and state laws and regulations relating to employee protection and safety.

## **Protect your workers from undue hazards by switching to modern safer B.I. FREEZE-PAKS**

### **Save Money With B.I. FREEZE-PAKS!**

#### **1. Reduce Wasted Material!**

Because of the precise mix ratios required, many two-part systems cannot be accurately proportioned in the small-sized batches needed for production. Consequently, larger batches are prepared and then only a small percentage is utilized during the useful working life. With the costs and availability of all materials becoming increasingly important, reduction of waste will be a significant contribution to reduced production costs. The use of B.I. FREEZE-PAKS, in the correct size package that can be consumed during its useful working life, will eliminate this costly waste.

#### **2. Reduce Rejects!**

Most rejects of parts and components resulting from failure of the adhesive or potting compound can be traced to inaccurate weighing or inadequate mixing. The use of our laboratory-tested B.I. FREEZE-PAKS eliminates these errors. Completed parts will not end up in the scrap heap because of production line slip-ups and mistakes.

#### **3. Increased Production!**

With an off-the-shelf supply of B.I. FREEZE-PAKS on hand at all times, production will not be delayed or suspended while fresh epoxy is dispensed, mixed and distributed. Easy application is assured with the convenient B.I. FREEZE-PAK container, even in confined space. There is the correct package for each job.

#### **4. No Special Equipment or Extra Space!**

Only a small low-cost mechanical freezer is required. Special mixing equipment is no longer required. Maintenance costs are reduced and more space is available for production.

#### **5. No Clean-Up!**

The messy, time-consuming and exacting clean-up of expensive dispensing and mixing equipment is eliminated forever. There are no messy containers or sticky bench tops to clean. The protective package of the B.I. FREEZE-PAK is the only container and it is thrown out after use.

### **Vacuum Degassed**

B.I. FREEZE-PAKS are vacuum degassed. This special feature removes entrapped air from the premixed adhesive prior to packaging. Degassed adhesives are stronger and denser. Because there are no discontinuities in the cured film, cracks and failures caused by stress concentrations are eliminated and leak-proof joints are routine. Our experience indicates that properly degassed systems outperform those that are mixed in the conventional manner. This special high performance feature is available at no extra cost with all B.I. FREEZE-PAKS.

## **Availability**

B.I. FREEZE-PAKS are meeting the special needs of the electronics, instruments and other industries requiring the highest quality product. All B.I. products are available in FREEZE-PAKS. In addition, Bacon Industries processes most commercially available epoxy compounds, customer formulations and other selected systems. B.I. custom manufactures FREEZE-PAKS using many commercially available formulations so that the advantages and convenience of B.I. FREEZE-PAKS are now available regardless of the product requirement.

## **FREEZE-PAK Sizes**

Because there are so many varied applications, B.I. has available a number of standard FREEZE-PAK containers. One is sure to be correct for each application. They range in size from 1cc syringes and MINI-CUPS upwards to industrial syringes and cartridges. Some containers are designed for use with automated dispensing equipment. Our packaging engineers will assist in the selection of the correct package for each application.

## **Storage**

B.I. FREEZE-PAKS are stored at minus 40°F or colder. The shelf life of many systems at minus 40°F is at least one year. Storage of B.I. FREEZE-PAKS is accomplished easily in a mechanical freezer or dry ice chest. Bacon industries can supply mechanical freezers for these requirements.

## **Shipping**

B.I. FREEZE-PAKS are shipped in insulated cartons with dry ice to maintain the contents below minus 40°F. Each carton contains a special B.I. BLUE safety indicator which melts when exposed to temperatures likely to affect FREEZE-PAK quality. B.I. FREEZE-PAKS in this specially engineered shipping package are shipped routinely throughout the United States and to other parts of the world.