

### Factor II, Incorporated

Inventing and Innovating...
(Information: 1.928.537.8387)
ONLINE ORDERING www.factor2.com

# PRODUCT INFORMATION A-225-50 A-225-60 A-225-70

#### **PRODUCT DESCRIPTION:**

Silbione® Liquid Silicone Rubbers (LSRs) a are two-component platinum-catalyzed silicone elastomers engineered for use in liquid injection molding(LIM) processes where high strength molded parts are desired for less than 29 day medical applications. Liquid Silicone Rubber (LSR) is a pumpable, colorless, translucent paste. When A and B components are together in equal portions, the liquid will cure to a tough, elastomer viaaddition-cure chemistry. These systems are supplied in two componet kits, consisting of equal amounts of part A and B.

#### **FEATURES:**

- · Easy processing
- · Excellent mold release for shorter cycle times
- · Superior clarity
- · High performance physicals high tear and elongation
- · Rapid cure at elevated temperatures
- · Can be post-cured, but post cure is not necessary to achieve desired physicals

#### **APPLICATIONS:**

Factor II's Liquid Silicone Rubber (LSR) Systems are designed to be mixed in equal parts using standard LIM processing equipment and techniques. Cure is typically achieved in 15 seconds at 175°C. Cure rate can be increased by increasing temperature. Postcure is suggested to stabilize physical properties for implant applications.

Some specific applications include:

- Precision molded parts
- Encapsulated electronic parts
- Insert molding

#### **TYPICAL PROPERTIES:**

Compression Molded 5 minutes @ 177°C

Appearance: Clear

Consistency: Heavy Pumpable Paste

|                       | <u>A-225-50</u> | <u>A-225-60</u> | <u>A-225-70</u> |
|-----------------------|-----------------|-----------------|-----------------|
| Durometer, Shore A    | 50              | 60              | 68              |
| Tensile Strength, psi | 1225            | 1300            | 1300            |
| Elongation, %         | 570             | 480             | 450             |
| Tear Strength, ppi    | 265             | 250             | 240             |
| Specific Gravity      | 1.12            | 1.13            | 1.14            |
| Modulus 100% psi      | 350             | 425             | 530             |

#### **MIXING:**

**Silbione® LSRs** are supplied as kit-matched products. Parts A and B components are designed to be mixed in equal parts using standard liquid injection molding processing equipment and techniques. Airless mixing, metering and dispensing equipment are recommended.

• Kit matching, accurate measuring and complete mixing are essential factors in obtaining consistent results.

#### Cure:



## Factor II, Incorporated

Inventing and Innovating...
(Information: 1.928.537.8387)
ONLINE ORDERING www.factor2.com

Cure is initiated by heating the mixed elastomer. Cure is dependent upon molding temperature and part size. Special care must be taken to assure clean molds and a clean work area with no organic rubbers used on the same processing equipment.

Traces of foreign materials can poison the catalyst and inhibit the cure. All metering and mixing equipment should be thoroughly cleaned. Polymer systems, which contain traces of amines, sulfur, nitrogen oxide, organotin compounds and carbon monoxide can interfere with the cure of this product and should be avoided.

#### **WARNINGS ABOUT PRODUCT SAFETY:**

Factor II technology believes that the information and data contained herein is accurate and reliable; however, it is the user's responsibility to determine suitability and safety of use for these materials.

Factor II cannot know the specific requirements of each application and hereby makes the user aware that it has not tested or determined that these materials are suitable or safe for any application. It is the user's responsibility to adequately test and determine the safety and suitability for their application. Factor II makes no warranty concerning fitness for any use or purpose. There has been no testing done by Factor II to establish safety of use in any medical application. Factor II has tested this material only to determine if the product meets the applicable specification. (Please contact Factor II for assistance and recommendations when establishing specifications.) When considering the use a Factor II product in a particular application, you should review the latest Material Safety Data Sheets and contact Factor II for any questions about product safety information you may have.

#### **PATENT WARNING:**

Factor II Technology disclaims any expressed or implied warranty against the infringement of any patent. Factor II does not warrant that the use or sale of the products described herein will not infringe the claims of any U.S. patents or other country's patents covering the product itself or the use in combination with other products or in the operation of any process.

IT IS RECOMMENDED THAT THE PURCHASER THOROUGHLY TEST ANY APPLICATION PRIOR TO FULL SCALE PRODUCTION OR COMMERCIALIZATION. INFORMATION CONTAINED IN THIS TECHNICAL PROFILE SHOULD NOT BE TAKEN AS INDUCEMENT TO FRINGE ANY PATENT. FACTOR II WARRANTS ONLY THAT ITS PRODUCTS MEET ITS SPECIFICATIONS. THERE IS NO WARRANTY OF MERCHANTIBILITY OF FITNESS FOR USE OR ANY OTHER WARRANTIES EXPRESS OR IMPLIED. FACTOR II MAKES NO GUARANTEE OF SATISFACTORY RESULTS

#### NOTE

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products.

SILBIONE® is a Trademark of Blue Star