



## TECHNICAL INFORMATION

### HARDMAN® TUFF STUFF™ Urethane A-85 DOUBLE/BUBBLE® Purple-Beige Package #04024

#### PRODUCT DESCRIPTION

Double Bubble Urethane A-85 is a medium-hardness, highly flexible two-component polyurethane system designed for use as adhesive or sealant and in casting, filling and coating applications requiring rapid cure, high flexibility, high resilience, transparency and resistance to breakdown or yellowing from exposure to UV light.

Kalex 42223-52223 is impervious to water exposure during the curing process, yet bonded substrates should be reasonably water-free before application.

To obtain the best cured properties, accurate proportioning and thorough mixing are essential.

#### TYPICAL USES

Urethane A-85 is suitable for sealing and repair of flexible substrates such as flexible conveyor belts, printing press rollers, rubberized fabrics, shoes, ski boots and other sports equipment. It is also excellent for bonding refrigeration and AC equipment.

#### PACKAGING

The DOUBLE/BUBBLE package is a handy, dual-pouch, one-shot, job-size packaging concept. It reduces the waste typically associated with the use of larger quantities of two-component adhesives. This unique packaging ensures that DOUBLE/BUBBLE adhesives are always factory fresh and accurately portioned for optimum adhesive performance.

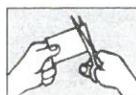
Urethane A-85 is also available in poly bottles, 1-gallon cans, 5-gallon pails and 55-gallon drums.

#### HOW TO USE

Surface must be clean and dry before application. Remove all chemicals, dirt, wax and oil. Abrading or of the bonded surface is recommended. Pre-cleaning with a mild solvent such as acetone or acetone-containing blends will enhance bonding characteristics over high-flexibility substrates.



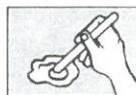
FOLD



SNIP



SQUEEZE



MIX/APPLY

Fold the DOUBLE/BUBBLE package along the center seal, snip the end, squeeze out the contents, mix thoroughly and apply.

#### TYPICAL UNCURED PROPERTIES

	Part A	Part B	Mixed
Color	Clear	Clear	Clear
Viscosity @ 25 °C, cps.	12,000	2,000	4,000
Weight per Gallon, lbs.	8.55	8.08	8.32
Specific Gravity @ 25 °C	1.02	0.97	1.00
Work time, minutes	---	---	15
Handling strength, minutes	---	---	90
Shelf Life, months	18	18	---

#### TYPICAL CURED PHYSICAL PROPERTIES

(Tested at 25 °C unless otherwise indicated)

Test	Result
Hardness, Shore D	50
Tensile Strength, psi	900
Elongation, %	>400
Maximum Service Temp.	66 °C (150 °F)

#### Lap Shear Strength

(acid-etched aluminum to aluminum)

Shear Strength 25°C, psi	400
--------------------------	-----

#### STORAGE AND HANDLING

Store DOUBLE/BUBBLE adhesives at room temperature in a dry environment. Extreme low temperatures may cause crystallization. Extreme high temperatures may degrade the properties.

A wide variety of cleaning solutions are available for cured and uncured epoxies and polyurethanes

#### SAFETY

These materials are intended for commercial and industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

Although the system contains low volatility materials, care should be taken in handling. Use adequate ventilation in the work area.

These materials may cause dermatitis in susceptible individuals. Keep off skin and out of eyes. In case of accidental skin contact, wash thoroughly with soap and water. In case of eye contact, flush eyes thoroughly with water and consult a physician immediately.

Refer to Material Safety Data Sheet for additional information.

### **ADDITIONAL INFORMATION**

Visit our web site at:

[www.royaladhesives.com](http://www.royaladhesives.com)

Contact us at:

Royal Adhesives and Sealants, LLC  
2001 W. Washington Street  
South Bend, IN 46628  
Phone: 800-999-GLUE  
Fax: 574-246-5425  
Web: [www.royaladhesives.com](http://www.royaladhesives.com)

### **NOTE**

The statements made herein are based on our research and the research of others, and are believed to be accurate. No guarantee of their accuracy is made, however, and the products discussed are sold without warranty, expressed or implied, including warranty of merchantability and fitness for use of this material, and upon condition that purchasers shall take their own tests to determine the suitability of such products for their particular purpose. The user assumes all risk of use or handling, whether or not in accordance with any statements of the supplier. Supplier's liability, if any, for any action arising out of the material being supplied shall be limited to replacement of material. Statements concerning the possible use of these products are not intended as recommendations to use these products in infringement of any patent.