600 Cortlandt Street Belleville, NJ 07109 USA Tel: (888) 442-7362 Tel: (973) 751-3000

Fax: (973) 751-8407

Web: www.royaladhesives.com ISO 9001:2000



TECHNICAL INFORMATION

HARDMAN® Silicone DOUBLE/BUBBLE® Brown Package #04030

PRODUCT DESCRIPTION

HARDMAN Silicone is a one-part silicone sealant that cures in the presence of atmospheric moisture to a durable, flexible rubber, which has excellent adhesion to most non-porous surfaces.

Silicone is recommended for the following substrates:

<u>Metal</u>	<u>Plastic</u>	<u>Other</u>
Aluminum	ABS	Ceramics
Carbon Steel	Acetate	China
	Acrylic	Glass
	Ероху	Stone
	Fiberglass	Wood
	Nylon	
	Phenolic	
	Polycarbonate	
	Polyester	
	Polystyrene	
	Polyurethane	
	, DVC	

TYPICAL USES

HARDMAN Silicone is designed for sealing and bonding such non-porous surfaces as glass, metal, ceramic, porcelain, most plastics and pointed surfaces. Typical applications include glazing butt and lap sheer joints, stopless glazing, glass partitions, glass blocks, cap, head and toe bead in conventional glazing, solar panels, skylights, mullions, curtain wall joints, perimeter caulking of metal and most plastic frames, duct work, vents and air conditioning units.

PACKAGING

The DOUBLE/BUBBLE package is a handy, 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.

HOW TO USE

Surface must be clean and dry before application. Remove all chemicals, dirt, wax and oil.







SNIP

SQUEEZE

APPLY

Snip the corner of the DOUBLE/BUBBLE package, squeeze out the contents, and apply.

HARDMAN Silicone has a work life of 5 to 10 minutes. The moisture content of the air at the time of application and during cure has a direct influence on the work life and speed of cure of the sealant. It can be applied at outdoor temperatures of $-37~^{\circ}\text{C}$ ($-35~^{\circ}\text{F}$) provided that the surfaces are clean and frost free. After cure it remains rubbery down to $-62~^{\circ}\text{C}$ ($-80~^{\circ}\text{F}$) and will retain its properties after extended exposure up to 204 $^{\circ}\text{C}$ (400 $^{\circ}\text{F}$).

TYPICAL UNCURED PROPERTIES

Color	Translucent White
Viscosity @ 25 °C, cps	Thixotropic Paste
Weight per Gallon, lbs.	8.68
Specific Gravity @ 25 °C	1.04
VOC Content, lb. /gal.	0.4
Work time, minutes	8
Tack-free time, minutes	20
Full cure, hours	24
Shelf Life, months	24

TYPICAL CURED PROPERTIES

(Tested at 25 °C unless otherwise indicated)

<u>Test</u>	<u>Result</u>
Hardness, Shore A	25
Tensile Strength, psi	250
Elongation, %	400
Service Temp.	-62 °C to 204 °C
-	(-80 °F to 400 °F)

STORAGE AND HANDLING

Store DOUBLE/BUBBLE adhesives at room temperature in a dry environment.

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.

Silicone releases acetic acid during cure, which may cause irritation to eyes and to skin after prolonged contact. Contact lens wearers take appropriate precautions. IN CASE OF CONTACT, FLUSH EYES WITH WATER. CALL A PHYSICIAN. Remove from skin with a dry cloth or paper towel. Wash with soap and water.

Refer to Material Safety Data Sheet for additional information.

ADDITIONAL INFORMATION

Visit our web site at:

www.royaladhesives.com

Contact us at:

Royal Adhesives and Sealants, LLC 600 Cortlandt Street Belleville, NJ 07109-3384 (888) 442-7362 Toll-free (973) 751-3000 Phone (973) 751-8407 Fax

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.