



TECHNICAL INFORMATION

HARDMAN® Regular-Setting Epoxy DOUBLE/BUBBLE® Black Package #04006

PRODUCT DESCRIPTION

HARDMAN Regular-Setting Epoxy is a two-component, room temperature cure epoxy system designed to set in 45 minutes in a thin (10 mil) film. Because of its low mix viscosity, this adhesive should be considered for use in applications which require a very thin glue line.

HARDMAN Regular-Setting Epoxy is recommended for the following substrates:

Metal	Plastic	Other
Aluminum	Epoxy Phenolic	Wood

TYPICAL USES

HARDMAN Regular-Setting Epoxy is excellent for applications requiring a thin glue line. It is ideal for furniture repair, hobby use and sports equipment repair.

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.

HARDMAN Regular-Setting Epoxy 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.



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
	Lt. Amber	Lt. Amber	Lt. Amber
Color			
Viscosity @ 25 °C, cps	3,500	5,700	3,700
Weight per Gallon, lbs.	9.8	8.1	8.9
Specific Gravity @ 25 °C	1.18	0.97	1.07
Flash Point, PMCC, °C	166	99	---
Work time, minutes	---	---	45
Tack free time, minutes	---	---	60
Handling Strength, hours	---	---	4
Shelf Life, months	24	24	---

TYPICAL CURED PHYSICAL PROPERTIES

(Tested at 25 °C unless otherwise indicated)

Test	Result
Hardness, Shore D	78
Impact Strength, ft.-lbs.	6.7
Maximum Service Temp.	52 °C (125 °F)

Lap Shear Strength (acid-etched aluminum to aluminum)

Cure Schedule @ 25 °C	3 hours	24 hours	2 weeks
Shear Strength, psi	500	2,000	2,900

Hardness (cure schedule 24 hours @ 25 °C)

Test Temperature	25 °C	66 °C	93 °C	121 °C	149 °C
Hardness, Shore D	78	12	8	8	6

TYPICAL CHEMICAL RESISTANCE PROPERTIES

(Tested at 25 °C unless otherwise indicated)

Total Immersion In:	Immersion Time, Days	% Weight Gain (Loss)
Water	1	0.10
	8	0.50
Ethyl Alcohol 50% Solution	1	1.34
	8	9.90
Hydrochloric Acid (2N)	1	0.22
	8	1.94
Sulfuric Acid, 30% Solution	1	0.16
	8	1.56
Toluene	1	0.25
	8	2.06
1,1,1 Trichloroethane	1	11.10
	8	37.00
VM+P Naphtha	1	0.04
	8	0.40

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

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NOTE

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