

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	100% solids aluminum oxide filled machinable resurfacer
<b>Description</b>	A machine grade epoxy putty for repairing damaged shafts, valves, and other mated metal surfaces. It resists a wide variety of chemicals and is engineered to repair corroded and worn metallic surfaces efficiently and economically.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Good overall chemical resistance</li> <li>• Simple troweled application</li> <li>• Machinable in 2-4 hours</li> <li>• Zero VOC</li> <li>• Excellent adhesion</li> <li>• Excellent abrasion resistance</li> <li>• Sandable</li> </ul>
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>• Chutes</li> <li>• Hoppers</li> <li>• Fan Blades</li> <li>• Pump Housings</li> <li>• Impellers</li> <li>• Key-Ways</li> </ul>
<b>Color</b>	Light Gray (0725)
<b>Dry Film Thickness</b>	60 - 500 mils (1524 - 12700 microns) total DFT
<b>Solid(s) Content</b>	By Volume 100%
<b>Coverage Rate</b>	3 ft <sup>2</sup> @ 1/16" thick (29 cu. in.) per 2.5 lb. kit
<b>VOC Values</b>	<b>As Supplied</b> : 0 g/l
<b>Dry Temp. Resistance</b>	Continuous: 250°F (121°C) Non-Continuous: 450°F (232°C)
<b>Chemical Resistance</b>	<ul style="list-style-type: none"> <li>• Inorganic Acids</li> <li>• Alkali Solutions</li> <li>• Some Solvents</li> <li>• Salts</li> <li>• Oils</li> </ul>

## SUBSTRATES & SURFACE PREPARATION

**Metal** | White Metal SSPC SP-5 or NACE No.1, 3.0 mil minimum profile.

## PERFORMANCE DATA

**All test data was generated under laboratory conditions. Field testing results may vary.**

Test Method	Results
Compressive Strength ASTM D695	15,500 PSI
Shore D Hardness ASTM D2240	91
Tensile Adhesion ASTM D4541	1,850-2,250 PSI
Tensile Shear Adhesion ASTM D1002	2,250 PSI

# Polymer Steel MG

## PRODUCT DATA SHEET



### MIXING & THINNING

<b>Mixing</b>	Add Part B to Part A and mix until a uniform consistency is achieved. Apply to the prepared surface using a plastic squeegee or trowel. Can be machined approximately 2-4 hours after application. Recoat material as soon as it is firm to touch (normally 4-6 hours).
	If amine blush (oily film) is present wash with warm water and detergent and dry surface before recoating.
<b>Ratio</b>	2.4:1 ratio by volume (A:B)
<b>Pot Life</b>	50 minutes @ 50°F (10°C)
	40 minutes @ 70°F (21°C)
	20 minutes @ 90°F (32°C)

### APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	80°F (27°C)	110°F (43°C)	110°F (43°C)	90%

Substrate temperature must be 5°F (3°C) above the dew point.

### CURING SCHEDULE

Surface Temp.	Dry to Touch	Minimum Recoat Time	Cure for Service
75°F (24°C)	2 Hours	4 Hours	24 Hours

At 70°F (21°C), Polymer Steel MG can be machined in approximately 2-4 hours after application.  
Application of additional heat will shorten cure times.

### CLEANUP & SAFETY

<b>Cleanup</b>	Use S-10 Cleaning Solvent or Carboline Thinner 2 to clean tools and equipment.
<b>Safety</b>	Read and follow all caution statements on this product data sheet and on the SDS. Employ normal safety precautions. Keep container closed when not in use.
<b>Ventilation</b>	Ventilation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. Use MSHA/NIOSH approved air respirators as needed.
<b>Caution</b>	Fire and explosion hazards: This product contains less than 1% volatile components, however, vapors are heavier than air and can travel long distances, ignite and flash back. Eliminate all Ignitions sources. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

### PACKAGING, HANDLING & STORAGE

<b>Packaging</b>	<b>2.5 lb kit:</b> <i>Packaged together in one cardboard box</i> Base: 0.090 Gallon (in a 32 oz white jar w/ lid) Hardener: 0.038 Gallon (in a 8 oz white jar w/ lid) Includes mixing sticks and applicator squeegee.
<b>Shelf Life</b>	Part A: 12 months Part B: 12 months  Material is not returnable after 90 days from purchase.
<b>Storage</b>	Warning: All Dudick products classified with DOT labels as either white, yellow or red labels must not be mixed or stored together as an explosive reaction can occur.  All products should be stored in a cool, dry area away from open flames, sparks or other hazards.
<b>Shipping Weight (Approximate)</b>	Outside packaging(2.5 lb kit): 3.4 lbs.

### WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.