

Integrated Polymer Industries, Inc.
 9741 Irvine Center Drive, Irvine CA 92618
 Tel: 949-788-1050
 Fax: 949-788-1051



BE SAFE! READ OUR PRODUCT SAFETY INFORMATION...AND PASS IT ON. PRODUCT LIABILITY LAW REQUIRES IT.

MT-400 IPI-UltraMetal™

Corrosion Resistant, Zero-VOC, Room-Temperature-Cure, Two-Component, Machinable, Metal Repair Compound
 Application Data Bulletin 180704 011512

1. Material Description

- Designed for machinable repairs for rehabilitation of broken, worn, or older equipment or machine parts
- Provides in-situ, quick, cost effective, and permanent repairs at a fraction of replacement costs
- Saves downtime, labor, energy, and money by using in-house manpower, partial disassembly, and no moving or transportation.
- Repairs cracked US Navy FOD screens and engine blocks; scored shafts, hydraulic rams, and worn king pins and other equipment; oversize bearing housings, damaged machine parts, and more
- Cold welding, where open flames pose danger, or access is limited, or downtime is too costly.
- Solventless (zero VOC) , two-component, room-temperature-cure system with non-sag- paste consistency

2. Physical Properties

Property, SM-180704	Base	Solidifier	Mixed	Comments
Color	Gray	Off White	Light Gray	
Weight, grams	368	86	454	
Density, g/cc	1.9	1.3	1.75	May be changed without notice
Coverage @ 6mm (~1/4")	N/A	N/A	245cm ² (~15in ²)	Thicker sections will yield less coverage.
Mix ratio , by weight	4.3	1	N/A	These ratios may change with the filler type and grade used in manufacturing.
Mix ratio, by volume (approx.)	3	1	N/A	
Potlife, min @ 25°C	N/A	N/A	20	
Application tools	N/A	N/A	IPI-Spatula, IPI-Applicator, or IPI-Notched trowel	
Touch dry time @ 25°C, (green cure)	N/A	N/A	4h	Longer when cool, shorter when hot.
Mechanical cure @ 25°C,	N/A	N/A	24h	Longer when cool, shorter when hot.
Application Thickness	N/A	N/A	5-15 mm	If thicker section needed, apply in layers.
Solids contents	100 % vol	100 % vol	100 % vol	No solvents! No shrinkage!
Shelf life (storage)	Indefinite	indefinite	Cool and dry storage conditions. If Base hardens during storage, warm it in a microwave oven for 15 seconds or so to soften it.	
Over-coating	N/A	N/A	2h	In recoating, apply "wet on sticky".
Flammability	None	None	None	No fire, explosion, or safety risk.
Chemical Resistance	N/A	N/A	Resistant to most industrial acids, bases, oils, and lubricants.	
Adhesion, psi @ 25°C	N/A	N/A	2,400	Blasted carbon Steel, Elcometer
Mixing Instructions	Scoop out components in proper mix ratio onto a clean surface. Mix them well with a spatula until no streaks remain. Apply the mix onto properly prepared metal surfaces, which shall be clean, dry, rough, and sound. Machine after green cure (3h @ 75F; longer at lower temp.) Allow overnight cure at ambient temperature of 55+F. Do not apply when the temperature of product, substrate, and or ambient are below 55F. Place repair into service after 24 hours of cure at above 55F ambient temperature.			
Caution	Wear gloves and goggles when using product. This product is for industrial use by trained individuals only.			
Disclaimer	Since quality of substrate, storage, handling, mixing, applying, curing, and service conditions are beyond the manufacturer's control, the manufacturer can assume no liability. Use at your own risk.			