



HPC/Industrial Maintenance

METALHIDE® 1001 Inorganic Zinc Rich Coating

Generic Type

Inorganic self-curing ethyl silicate, metallic zn

General Description

Heavy duty corrosion resistant primer for ferrous metal surfaces in industrial environments. Provides galvanic protection similar to galvanizing. Particularly suited as a lining for the interior, and as a primer to be topcoated for the exterior of tanks containing organic solvents, gasoline, and other fuels. It is also excellent for application in coastal, marine, and other offshore environments.

Tinting and Base Information

A red-gray color is obtained by using 97-674 powder; a green-gray color is obtained by using 97-675 powder.

97-673	Liquid Component A
97-674	Powder B Component (Red)
97-675	Powder B Component (Green)

Recommended Uses

Ferrous Metal

Features / Benefits

Provides galvanic corrosion protection.
Excellent resistance to organic solvents.
Full cure coating in 8- 12 hours (77°F at 50% rel. hum.)
Can be handled with slings in 5-6 hours (77°F at 50% rel. hum.)
Weldable

Limitations of Use

Avoid exterior painting late in the day when dew or condensation are likely to form or when rain is threatening. Do not apply at temperatures below 0°F (-17°C), nor above 140°F (60°C). Surface temperature must be at least 5°F (3°C) above the dew point. Care must be taken to avoid painting over ice at temperatures below 32°F (0°C). This product may be applied at relative humidities ranging from 30% to 85%. NOTE: When applying topcoats, it is sometimes necessary to apply a mist coat of the topcoat prior to application of a full wet coat. Cure time will vary with humidity and temperature.

Product Data

Gloss:	Matte
VOC*:	3.43 lbs/gal 412.00 g/L
Coverage:	315 to 434 sq ft/gal (29 to 40 sq. m/3.78L)
<i>Note: Does not include loss due to varying application method, surface porosity, or mixing.</i>	
DFT:	2.5 minimum to 3.5 maximum
Weight/Gallon*:	21.4 lbs. (9.7 kg) +/- 0.3 lbs. (136 g)
Volume Solids*:	68% +/- 2%
Weight Solids*:	84.5% +/- 2%
Mix Ratio:	1 part Liquid Comp. to 1 part Powder Comp.
Clean-up:	97-730, 97-731 PPG Thinners

Results will vary by color, thinning and other additives.

*Product data calculated on mixed product

Drying Time:

To Touch:	30 minutes
To Handle:	4 hours
To Recoat:	12 hours
Dry Time @77°F (25°C); 50% relative humidity	

Pot Life: 8 hours

In Service Temperature:

Dry Heat (F): 750°	Dry Heat (C): 399°
Wet Heat (F): 140°	Wet Heat (C): 60°

Flash Point: 97-673 53°F, (11.7°C)

General Surface Preparation

Remove all paint, mill scale, and rust. The surface to be coated must be dimensionally stable, dry, clean, and free of oil, grease, and other foreign materials. **WARNING:** Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. **EXPOSURE TO LEAD DUST OR FUMES MAY CAUSE ADVERSE HEALTH EFFECTS, ESPECIALLY IN CHILDREN OR PREGNANT WOMEN.**

Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as properly fitted and approved (e.g., NIOSH-approved) respirator and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-424-LEAD or the regional Health Canada office.

STEEL: Non-Immersion Service -- The minimum surface preparation for ferrous metal substrates is SSPC-SP6 Commercial Blast cleaning. Service life of coating is in direct proportion to surface preparation. Immersion Service -- Near White Metal Blast SSPC-SP10 is mandatory for ferrous metals. The surface to be coated must be clean, dry, and well prepared to receive the coating.

HPC Systems in Detail Brochure (H10788) COATING SYSTEMS: 202-HD, 206-HD, 217-HD, 227-HD, 229-HD, 238-HD, 242-HD, 245-HD, 314-HD, 331-HD, 350-HD.

For specific recommendations, see your

PITTSBURGH® Paints dealer or call 1-800-441-9695.

Recommended Primers

none Self priming on properly prepared surfaces.

Application Information

Recommended Spread Rates:

Wet Mils :	3.7 minimum to	5.1 maximum
Wet Microns:	94.0 minimum to	130.0 maximum
Dry Mils :	2.5 minimum to	3.5 maximum
Dry Microns:	63.5 minimum to	89.0 maximum

Application Equipment: Changes in application equipment, pressures and/or tip sizes may be required depending on ambient temperatures and application conditions.

Conventional Spray: Fluid Nozzle: DeVilbiss MBC-510 gun, with 64 air cap with E tip and needle, or comparable equipment. Atomization Pressure: 55 - 70 Fluid Pressure: Can not specify, dependent on numerous factors.

Airless Spray: Pressure 1500 psi, tip 0.017" - 0.021" Filter: 30 mes

Brush: Not Recommended

Roller: Not Recommended

Thinning:

DO NOT THIN IN VOC REGULATED AREAS. In non-regulated areas a small amount of 97-727 thinner may be added if material has thickened due to rapid solvent loss. Never exceed legal VOC limitations.

Directions for Use

Mix the 97-673 opaque liquid base using a mechanical mixer until no pigment remains at the bottom of the container. Transfer to a large container to facilitate mixing, and slowly sift in the zinc dust, 97-674 or 97-675, under continuous agitation. Mix until blend is uniform and free of lumps. Strain through a 30-60 mesh screen. **DO NOT MIX IN REVERSE ORDER.** Maintain constant agitation during use to prevent zinc dust from settling. The liquid component and the mixed paint must be protected from moisture. Relatively small amounts of contamination will cause gelation. Read all label and Material Safety Data Sheet (MSDS) information prior to use. MSDS are available through our website or by calling 1-800-441-9695.

Permissible temperatures during application:

Material:	50 to 90°F	10 to 32°C
Ambient:	50 to 100°F	10 to 38°C
Substrate:	50 to 100°F	10 to 38°C

PPGAF believes the technical data presented in this bulletin is currently accurate: however, no guarantee of accuracy, comprehensiveness, or performance is given or implied. Improvements in coatings technology may cause future technical data to vary from what is in this bulletin. For complete, up-to-date information visit our web site or call 1-800-441-9695

Packaging: 1-Gallon (3.78L) 5-Gallon (18.9L)

Not all products are available in all sizes. All containers are not full-filled.

**Bulletin: 97-673**

Additional copies of this bulletin can be obtained from our web site or by calling 1-800-428-7806.

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