



Dynamis Inc.

1. PRODUCT NAME

Z-TEC-753 - 752

**FAST CURING
BRUSHABLE
CERAMIC EPOXY
COATING SYSTEM
100% SOLIDS**

2. MANUFACTURER

Dynamis, Inc.
415 East Venice Avenue
Venice, Florida 34285

3. PRODUCT DESCRIPTION

BASIC USES: Z-TEC-753 - 752 is a high performance, brushable, ceramic filled epoxy coating system for the repair, protection and re-lining of pumps and process equipment. Rapid cure and an easy-to-use mix ratio (1:1 by volume), combined with excellent chemical, impact and wear resistance make Z-TEC an extremely versatile, protective, high build system for pump casings, fan blades, impeller blades, valves and other water circulating equipment.

This material may also be poured as a casting and then machined, sanded, drilled and tapped, as required, for general equipment repair. Extremely high build equipment repair may also be accomplished with Z-TEC-751, the putty version of this ceramic Z-TEC.

Z-TEC comes in two colors. The base or prime coat, Z-TEC-752, is white when mixed, and the top or finish coat, Z-TEC-753 is brick red. The color contrast is provided to help assure that two uniform coats are applied to all surfaces.

LIMITATIONS: Surfaces which are to be bonded to must: a) be at least 50° F, b) be structurally sound, c) be free from grease, oil, moisture or other contaminants and d) contain no more than 40 p.p.m. soluble salts.

COLOR: Top Coat: Z-TEC-753:	Component A: Brick red	Component B: Light Grey
	Mixed: Uniform Brick red	
Base Coat: Z-TEC-752:	Component A: White	Component B: Light Grey
	Mixed: White	

COVERAGE: A 2 Lb. Kit yields approximately 1 pint of mixed material or approximately 29 cubic inches.

4. TECHNICAL DATA

PHYSICAL PROPERTIES: RTC – 7 day cure @ 75° F

Specific Gravity	1.75 ± .1
Viscosity, Parts A & B mixed	14,000 – 16,000 cps
Solids	100%
Pot Life @ 75° F	30 – 60 minutes
Shore D Hardness	90
Tensile Strength, (unfilled resin) ASTM D-638	10,200
Compressive Strength, ASTM D-695	20,000 p.s.i.
Dielectric Strength Volt/Mil ASTM 9-149	558
Coverage/Lb. 15 mils	6 - 7 sq. ft.
Typical Brush Coat Thickness	15 mils
Temperature Resistance	Up to 350° F

CHEMICAL RESISTANCE: RTC – 7 days @ 75° F (30 day immersion).

H2O	No effect
10 wt. non-detergent transformer oil	No effect
30 wt. non-detergent oil	No effect
Kerosene	No effect
Fuel Oil	No effect
Salt Spray (1000 hours exposure)	No effect
10% HNO ₃	No effect
10% H ₂ SO ₄	No effect
10% HCL	No effect
50% Caustic Soda	No effect
50% Sodium Hypochlorite	No effect
5% Trisodium Phosphate	No effect

In general, the resistance of Z-TEC-753-752 is good for alkali and water, fair for acids and poor for solvents and concentrated acids.

5. INSTALLATION

PREPARATORY WORK: All surfaces to which Z-TEC-753-752 is to be applied must be free of all dirt, grease, oil and other contaminants. Grease and oil removal may be accomplished by wiping with Acetone, Methyl Ethyl Ketone or 1,1,1,Trichlorethane. Surfaces should then be grit-blasted or abrasive ground and air-blown clean. Air supply for blasting or grinding should be oil and moisture-free. Surfaces should be blasted to "white metal". Z-TEC-753-752 should not be feather edged and minimum application of three to five mils is required. Heating of the work area (up to 100° F to 110° F) is recommended for low temperature applications to drive off moisture and increase surface adhesion. Deeply pitted or worn areas should be repaired with Z-TEC-751 putty prior to application of coating system. Metals contaminated by salt solution should be grit and water blasted, allowed to stand overnight, re-blasted and air blown dry.

METHODS: Z-TEC-753-752 is normally applied with a short bristle brush.

MIXING: Z-TEC-753 and Z-TEC-752 are mixed 1 part Component A to 1 part Component B by volume. Stir each component separately before combining. Mix thoroughly with spatula or putty knife, taking care to scrape sides and bottom of mixing container. Mix three to five minutes until uniform white (base coat) or uniform red (top coat) color is achieved.

APPLICATION: Z-TEC-753-752 should be stored, mixed and applied at room temperature, approximately 75° F. Lower temperatures will increase pot life and cure time, while higher temperatures will accelerate both. Z-TEC-753-752 is to be applied in a two-coat application for best results. This eliminates pin holing. Maximum re-coat time between coats is four to six hours, without abrading surface of first coat. Recommended thickness of each coat is 15 – 20 mils.

Heat may be used to accelerate functional cure after initial tack-free cure is achieved at room temperature. Additional heat should not exceed 110° F to 120°F when accelerating cure.

CLEAN-UP: Clean tools and equipment immediately with a solvent such as Acetone, Methyl Ethyl Ketone or 1,1,1, Trichlorethane. Do not allow epoxy to cure on tools or equipment. Hands should be cleaned with commercial hand cleaner.

PRECAUTIONS: Z-TEC-753-752 is not flammable: however the cleaning solvent may be. Keep solvent away from heat, open flames or ignition sources. Avoid contact with skin and breathing of fumes from either epoxy or cleaning solvent. Consult material safety data sheet.

6. AVAILABILITY

Z-TEC-753-752 is available from:

Dynamis, Inc.
415 East Venice Avenue
Venice, Florida 34285
(941) 488-3999
800-828-8929
FAX (941) 488-0747
www.dynamisinc.com

7. GUARANTEE

The manufacturer warrants that the material meets specifications listed and limits any warranty to the replacement of material only.

The information contained in this specification sheet is based on data obtained by our own research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use of this data or product. This information is furnished and the products Z-TEC-753-752 sold upon the condition that the person receiving it shall make his own test to determine the suitability of the material for his particular purpose.

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