



Dynamis Inc.

1. PRODUCT NAME

Z-TEC-751

**FAST CURING
CERAMIC EPOXY
PUTTY
NON-SAGGING**

2. MANUFACTURER

Dynamis, Inc.
415 East Venice Avenue
Venice, Florida 34292

3. PRODUCT DESCRIPTION

BASIC USES: Z-TEC-751 putty is a high performance, ceramic filled epoxy putty for the repair, protection and re-building 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-751 putty an extremely versatile, protective, high build system for pump casings, fan blades, impeller blades, valves and other water circulating equipment. Z-TEC-751 is normally used for the repair of extremely worn or pitted areas in metal prior to coating with the Z-TEC-753-752 system. It may be ground, sanded, drilled and tapped, as required.

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: Component A: Dark Blue Component B: Light Grey
Mixed: Uniform Blue

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	1.95 ± .1
Viscosity, Parts A & B mixed	Trowelable putty
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
Cured Shrinkage, ASTM D-2566	.0020 in./in. ± .0002
Typical Thickness	15 mils – 100 mils
Temperature Resistance	Up to 350° F

CHEMICAL RESISTANCE: RTC – 7 days @ 75° F

H ₂ O	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-751 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-751 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-751 should not be feathered edged and minimum application of 5 to 10 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. Metals contaminated by salt solutions should be grit and water blasted, allowed to stand over-night, re-blasted and air blown dry.

METHODS: Z-TEC-751 is normally applied with a small trowel or putty knife.

MIXING: Z-TEC-751 is mixed one part Component A to one part Component B by volume. Mix 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 blue color is achieved.

APPLICATION: Z-TEC-751 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-751 may be applied in multiple layers, up to 1/2” to 3/4” thick and should be re-applied with no more than four to six hours between layers.

Heat may be used to accelerate functional cure after initial tack-free cure is achieved at room temperature. Additional heat should not exceed 100° 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-751 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-751 is available from:

Dynamis, Inc.
415 East Venice Avenue
Venice, Florida 34292
(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 product Z-TEC-751 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.