

ZeraDur™ 200

Fast-Setting Heavy-Duty Epoxy Floor Coating

DESCRIPTION

ZeraDur™ 200 is a 100% solids, two-component cycloaliphatic-cured epoxy floor coating. Recommended for indoor applications, the coating possesses a combination of fast-cure, low viscosity, chemical resistance, outstanding mechanical strength and good UV-resistance, all while providing a very attractive finish.

WHERE TO USE

ZeraDur™ 200 is recommended for use in highly demanding applications, including laboratories, hospitals, pharmaceuticals, electronics manufacturing, aircraft hangers, operating rooms, metal processing plants, and around swimming pools

BENEFITS

- 100% solids, with very low odour, zero VOC's
- Good UV resistance, and colour stability
- Low viscosity with excellent flow and leveling
- Fast setting; ideal for a quick turnaround projects
- Water and chemical resistant including battery acid
- Superior wear resistance
- Resistant to water spotting
- Approved by the "Canadian Food Inspection Agency" to be used in food processing facilities

HANDLING PROPERTIES

Mix Ratio, by volume	2 parts A: 1 part B
Viscosity (Mixed) @ 23°C (74°F)	700 cps
Solids Content	100%
Mixed Density.....	1.24 kg/litre (10.33 lb/US gal)
Pot Life @ 23°C (74°F)	15 minutes
Thin film set time @ 23°C (74°F)	6 hours
Foot Traffic @ 23°C (74°F)	12-16 hours
Vehicular Traffic @ 23°C (74°F)	16-24 hours
Full Cure and Maximum Resistance	7 days

DATA - Cured Film

Tensile Elongation	10% @ break (ASTM D638-86)
Tensile Strength	28 MPa (4000 psi) (ASTM D638-86)
Hardness (Shore D Scale)	82 (ASTM D2240-86)
Abrasion Resistance (ASTM D4060)	72 mg loss Taber Abrasion, C17 wheel, 1000 cycles
Impact Resistance	pass 160 in./lb. (ASTM D-2794)

SURFACE PREPARATION

ZeraDur™ 200 should be applied over clean, sound, dust free surfaces. For best results, surface should be prepared as follows:

Concrete (New):

Shot blasting or equivalent to remove surface laitance, curing compounds or form oils. Concrete should be minimum 28 days old or have 3% or less moisture content. Moisture content can be determined using test method ASTM D4263.

Concrete (Old):

Remove oil, grease, dirt and any unsound concrete using a combination of commercial degreasers, alkaline wash, shot blasting or diamond grinding. A combination of acid-etching and power wash can also be used. Cracks and surface defects should be repaired prior to the application of the coating. If acid etching is the method of choice for the preparation of the concrete surface, the etched surface must be thoroughly flushed and dry prior to the coating application.

Prime with ZeraPrime™ 100FS when the concrete substrate is dry, or ZeraPrime™ W-30FS when the surface is damp.

AREA PREPARATION

For optimal performance, both the coating and substrate should be maintained at 18 to 30° C (68 to 86°F) for 24 hours prior to beginning work. The same temperature range should be maintained during mixing, application, and cure.

Application in direct sunlight and rising surface temperatures may result in blistering of materials due to the expansion of entrapped air or moisture in the substrate. Concrete that has been in direct sunlight must be shaded 24 hours prior to the application and remain shaded until after the initial set.

MIXING

The mixing equipment used to mix the coating must be clean and free of any contaminants that may be present in the equipment from previously used products. Mix component A first to eliminate the possibility of settlement. Pour all of the liquid from Part A and Part B into the mixing container. A 'Jiffy Mixer' or a mud mixer blade on a slow speed drill is the preferred method of mixing. Mix the blended components for 2 minutes.

APPLICATION

Pour a workable amount of the mixed material on to the prepared substrate and spread it evenly over the surface with a flat squeegee. Using a lint free 5 mm nap roller, back roll the applied material to provide an even coat. Care should be taken not to over-roll the material as air may become entrapped in the coating. Two coats are recommended, one prime coat and one topcoat. If a non-slip sanded surface is required, a properly graded, dry, contaminant free grit should be broadcasted on the surface and back rolled to encapsulate the aggregate into the coating. Apply the second coat in the same manner as the first. Allow to cure thoroughly before exposing to chemicals or continuous traffic.

Disclaimer: Although ZeraDur can be made non-slip using the above described technique, floors may become slippery under certain conditions. Therefore, it is your own responsibility to determine the level and type of slip resistance that suits your specific needs. We recommend the use of additional slip-resistant aggregates in your floor if it will be exposed to wet, icy or oily conditions.

LIMITATIONS

- Do not apply ZeraDur™ 200 if the substrate and ambient temperatures are below 10°C (50°F).
- Do not apply less than 8-10 mils as an orange peel finish may appear due to insufficient material to self-level.
- Do not leave mixed material (Part A & B together) in the container for an extended amount of time, as it will harden, warm up and smoke.
- Not recommended for areas subjected to steam cleaning, harsh chemicals or heavy impact.
- Do not use over an existing floor without testing both the inter-coat adhesion as well as the adhesion of the existing floor to concrete.
- Do not apply in areas where the humidity is greater than 85%.
- May discolor under direct constant exposure to UV, and due to some chemical exposures.
- Do not use on slab-on-grade without vapour barrier.

COVERAGE

Based on 10 mils thickness per coat:
4 m²/litre (160 ft²/U.S. gallon)

NOTE: A minimum of 2 coats are required. (One prime coat and one topcoat).

PACKAGING

3.79 litre / 1 U.S. gallon units
11.4 litre/ 3 U.S. gallon units
56.7 litre/15 U.S. gallon units

CLEAN UP

Clean all equipment and installation tools immediately with xylene.

SAFETY PRECAUTION

Consult the Material Safety Data Sheet (MSDS) for specific instructions.

STORAGE

Store in a heated warehouse. Do not freeze.

SHELF LIFE

2 years from the date of manufacture if kept in original unopened containers

WARRANTY

“The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied conform to our standards. Zeraus Products Inc. makes no warranties, expressed or implied, as uses and applications are beyond our control. Zeraus Products Inc. shall not be liable for any injury, loss, or damage (direct or consequential) arising from use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.

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