

## DESCRIPTION

TuffRez 233AR is a three-component high performance, abrasion resistant aliphatic moisture cured coating. It is suited for use as a topcoat over epoxy coatings.

## TYPICAL APPLICATION

• Primer	PolySpec or TuffRez Epoxy Primer @ 5–7 mils
• Basecoat	Epoxy Basecoat from PolySpec @ 15-20 mils (various coatings available)
• Topcoat	TuffRez 233AR @ 3 mils (WFT)

## PERFORMANCE DATA

Abrasion Resistance, 1000 cycles/CS-17, 1000 gm (ASTM D-4060) ..	20 mg
Coefficient of Friction .....	0.70
VOC .....	0.60 lb/gal; 72 gm/L
Volume Solids .....	95%

## STORAGE & INSTALLATION

Storage Environment .....	Dry area, 65–80°F
Application Temperature, ambient .....	50–85°F
Application Temperature, substrate .....	Minimum 5°F above dew point
Service Temperature .....	Maximum 150°F
Shelf Life .....	6 months
Pot Life, @ 77°F .....	45 minutes
Foot Traffic, @ 77°F .....	6 hours
Full Service, @ 77°F .....	48 hours

*Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65°F to 80°F prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.*

## CONSIDERATIONS & LIMITATIONS

1. This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the flooring.
2. Apply over comparably colored epoxy basecoat.
3. Vehicles with rubber tires should not be parked on coating within 36 hours of installation.
4. Floors should be sloped to drain to prevent standing water or chemicals. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard.
5. Do not thin with solvents unless advised to do so by PolySpec.
6. Confirm product performance in specific chemical environment prior to use.
7. Prepare substrate according to “Surface Preparation” portion of this document.
8. Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab.
9. Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
10. For industrial/commercial use. Installation by trained personnel only.

# TuffRez<sup>®</sup> 233AR

## TECHNICAL DATA SHEET

### Polyurethane Coating, Abrasion Resistant

## BENEFITS

- Superior wear resistance & durability
- Minimizes effects of heavy industrial traffic
- Non-yellowing satin finish with excellent color retention
- Low odor
- Lasts up to 4 times longer than standard epoxies
- Matte Finish

## RECOMMENDED USES

- High traffic manufacturing areas
- High traffic warehouse floors & aisles
- Corridors & tunnels
- Airplane hangars

## GENERIC DESCRIPTION

Aliphatic Moisture Cured Polyurethane

## STANDARD COLORS

Light Gray, Medium Gray, Tan, White

Urethane Colors Packs packaged Separately

Additional colors available upon request.

## PACKAGING

3.25-Gallon Unit

## COVERAGE

500–530 ft<sup>2</sup> / gallon @ 3 mils (WFT)

## SURFACE PREPARATION

**Concrete:** Apply only to clean, dry and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants.

- *New concrete should be cured a minimum of 28 days.*
- *Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed.*
- *Remove any laitance or weak surface layers.*
- *Concrete should have a minimum surface tensile strength of at least 300 PSI per ASTM D-4541.*
- *Surface profile shall be CSP-3 to CSP-5 meeting ICRI (International Concrete Repair Institute) standard guideline #03732 for coating concrete, producing a profile equal to 60-grit sandpaper or coarser. Prepare surface by mechanical means to achieve this desired profile.*
- *Moisture vapor transmission should be 3 pounds or less per 1,000 square feet over a 24 hour time period, as confirmed through a calcium chloride test, as per ASTM E-1907. Quantitative relative humidity (RH) testing, ASTM F-2170, should confirm concrete RH results <75%.*
- *All surface irregularities, cracks, expansion joints and control joints should be properly addressed prior to application.*
- *Outgassing may occur due to the porosity of some concrete surfaces. To reduce the effect of outgassing, the primer and coating should be applied when the temperature of the concrete substrate is dropping. This usually occurs in the evening; however, the concrete substrate temperature should be measured with a surface thermometer for verification. Double priming will greatly reduce the effects of outgassing by additionally filling the pores in the concrete.*

**Refer to PolySpec Surface Preparation Guidelines for more details.**

## INSTALLATION STEPS

1. TuffRez 233AR is normally applied over a PolySpec or TuffRez Epoxy Primer or as a finish coat over a TuffRez epoxy floor coating system. See applicable data sheets for detailed installation instructions of these products.  
  
*NOTE: For use as a topcoat for TuffRez epoxy coatings, apply within 24 hours of epoxy installation. If 24 hours has passed, sand the coating and wipe with a 50:50 mixture of water and isopropanol. Once solvent has flashed, proceed with application of TuffRez 233AR.*
2. Add Component C (color pack) to Component A Resin and mix for 30 seconds with a jiffy-type mixer.
3. Pour Component B Hardener into Component A Resin pail and mix with a mechanical jiffy-type mixer operated at high speed for 30 seconds.
4. Add Component D Filler. Mix for 2 additional minutes.
5. Apply at 3 mils WFT (maximum) using 1/4" or 1/8" nap rollers; coating may foam at a greater film thickness. To minimize lap lines in finish coat, immediately cross roll material (uniform 90° angle to initial coat).
6. For best results, clean tools and equipment before product has cured, using aromatic solvents such as xylene or toluene. If material has cured, use PolySpec® All Purpose Cleaner, a nonflammable and non-evaporating cleaner. Always wear gloves when using this product.

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