

## DUR-A-GARD ESD

### DESCRIPTION

DUR-A-GARD ESD is a 2-component, pigmented 100% solids static dissipative coating. This coating provides a static dissipative ( $10^6$ – $10^9$   $\Omega$ /Square) surface with a high gloss finish. DUR-A-GARD ESD provides an average of 14v Body Voltage Generation when utilizing dissipative footwear. Resistance readings are consistent for the life of the floor and are independent of ambient humidity. DUR-A-GARD ESD protects new and existing concrete floors from many chemicals and was designed for ultimate cleanability. The system is designed for areas where dirt or dust cannot be tolerated while providing static dissipation to protect against electrostatic discharge.

### BENEFITS

- Static Dissipative
- Easy to Clean
- 14v Avg. BVG
- Durable
- Stain Resistant
- Dissipates 5000 Volt charge to Zero in 0.01 seconds

### LIMITATIONS

This product is best suited for application in temperatures between 60°F and 85°F. Top-coating with non-conductive waxes or finishes will render the static dissipative properties ineffective. This product is not intended for use in munitions or explosive manufacturing facilities.

### TYPICAL USES

- Pharmaceutical Facilities
- Processing Areas
- Plastic Manufacturing
- Electronics Assembly
- Clean Rooms
- Packaging Lines
- Laboratories

### COLORS

DUR-A-GARD ESD is available in Arctic Grey, Medium Grey, Slate Grey Smoke Blue, Tile Red, and Beige.

### PACKAGING

DUR-A-GARD ESD packaged in 1-gallon cans or 5-gallon pails. Shelf life is 6 months in unopened containers.

### SURFACE PREPARATION

This product requires preparation in order to perform as expected. Substrate must be profiled, clean, sound, and dry. Substrate must be primed with DUR-A-GLAZE #4 ESD PRIMER. Please refer to the Surface Preparation Guidelines on our website for more information.

### APPLICATION METHOD / SPREAD RATES

Please refer to the DUR-A-GLAZE #4 ESD PRIMER / DUR-A-GARD ESD Application Instructions for more information.

### GUIDE SPECIFICATIONS

This product is part of the DUR-A-FLEX family of polymer systems. Please refer to the master Specifier's Guide for complete three part guide specs.

### DRAWINGS AND DETAILS

Standard CAD drawings and details are available for coves, drains, breaches, transitions, etc. Please refer to the master Drawings and Details guide for actual drawings.

### JOINT GUIDELINES

Refer to the Joint Guidelines for complete details on our website.

### MOISTURE CONCERNS

Normal limits for moisture vapor transmission for epoxy floor systems are 3 lbs./1,000 sq. ft./24 hour using the calcium chloride test per ASTM F-1869 or 75% relative humidity using in-situ Relative Humidity Testing per ASTM F-2170. Please refer to the Floor Evaluation Guidelines at [www.dur-a-flex.com](http://www.dur-a-flex.com) for complete details.

### CLEANING

This product is considered a low maintenance flooring solution however, certain textures and service environments do require certain procedures. Please refer to the master Cleaning Guide on our website.

### TECHNICAL INFORMATION

Mix Ratio	3 parts Resin to 1 part Hardener
Color	Arctic Grey, Beige, Medium Grey, Slate Grey Smoke Blue, and Tile Red
Mixed Viscosity at 70° F	1,700 cps
Pot life at 70° F	20 – 25 Minutes
Cure Time, Touch Dry at 70° F	8 – 10 Hours
Cured Film Thickness	16 mils
Toxicity	Non – Toxic, USDA Approved

Physical Property	Test Method	Result
Surface Resistivity	ASTM D-257	10 <sup>6</sup> -10 <sup>9</sup> Ω/Square
Static Decay	Mil-Std-3010, Method 4046	0.01 Seconds
Body Voltage Generation (with dissipative footwear)	ESD STM 97.2	14v
Compressive Strength	ASTM D-695 ASTM C-579	16,000 psi 10,500 psi
Tensile Strength	ASTM D-638 ASTM C-307	3,000 psi 1,950 psi
Tensile Elongation	ASTM D-638	7.50%
Flexural Strength	ASTM D-790 ASTM C-580	4,000 psi 2,900 psi
Hardness (Shore D)	ASTM D-2240	75-80
Linear Shrinkage	ASTM D-2566	0.02%
Linear Expansion	ASTM D-696	2 × 10 <sup>-5</sup>
Bond Strength to Concrete	ASTM D-4541	400 psi substrate fails
Indentation	MIL D-3134	.025 MAX
Impact Resistance	MIL D-3134	Pass
Water Absorption	ASTM D-570	0.04%
Heat Resistance Limitation		140°F – 200°F
Flammability	ASTM D-570	Self Extinguishing
Flame Spread/NFPA 101	ASTM E-84	Class A
Abrasion Resistance CS17 Wheel 1000 GM Load 1000 Cycles	ASTM C-501	40 mg loss
Coefficient of Friction	ASTM D-2047	>0.6
VOC Content		7.45 g/l

#### **CAUTION**

**Slight batch-to-batch color variations may occur. When ordering to match a previous color, inquire if the same batch number or quality control number is still available.** Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed. **KEEP OUT OF REACH OF CHILDREN.**

*Before using any DUR-A-FLEX, Inc. product, be sure the Material Safety Data Sheet is read and understood.*