

Corporate Offices 1818 Miller Parkway Streetsboro, OH 44241 330-562-1970 330-562-7638 FAX www.dudick.com

# POLYMER STEEL SG (Surfacing Grade)

100% SOLIDS, ALUMINUM OXIDE-FILLED MULTIFUNCTIONAL EPOXY COATING, CAN BE USED OVER RG GRADE FOR A SMOOTHER FINISH

#### **FEATURES**

"0" VOC

Excellent abrasion resistance Good overall chemical resistance High temperature resistance

#### RECOMMENDED APPLICATIONS

Chutes Pump Housings Hoppers Flue Gas Scrubbers

Impellers Fan Blades

# CHEMICAL RESISTANCE

Inorganic Acids Salts Alkali Solutions Oils

Some Solvents

#### TEMPERATURE LIMITS

Immersion 250°F\*

Dry Excursions to 450°F

\*Consult Dudick representative for specific temperature limit for your exposure.

**COLORS** 

Light Gray Black

# PHYSICAL PROPERTIES

Compressive Strength 20,500 PSI

ASTM D-695

Shore D Hardness 95-97

ASTM D-2240

Tensile Adhesion 1800-2000 PSI

ASTM D-4541

Taber Abrasion 22 mg.

ASTM D-4060

Tensile Shear Adhesion 3000 PSI

ASTM D-1002

VOC 0

ASTM D-3960

#### **SPECIFICATIONS**

**Polymer Steel SG** shall be a 20-40 mil thick, 100% solids, aluminum oxide filled, polymer steel epoxy coating, as manufactured by Dudick, Inc. Material shall be applied by stiff brush, plastic squeegee or trowel in accordance with manufacturer's recommended practices.

#### THE POLYMER STEEL SG SYSTEM

The Polymer Steel SG (optional) user of a moisture tolerant primer and 20-40 mils of aluminum oxide filled, multi-functional epoxy resin to protect metal substrates.

**Primer 67** is designed to prevent abrasive blasted metal from developing rust bloom. Consult Dudick, Inc. for primer recommendation. The use of primer is optional but frequently used on large surface area projects.

# **PACKAGING**

# **Polymer Steel SG (Surfacing Grade)**

# One Carton Containing:

- 4 2.5 lb. Units of Polymer Steel SG (50 cu.in.)
- 4 Mixing Spatulas
- 4 Plastic Applicators

# ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL

SQUARE FEET PER GALLON		
STEEL		
PRIMER 67	250-300 ft. <sup>2</sup>	
Polymer Steel SG		
20 MIL DFT	13 ft <sup>2</sup> @ 20 mils per 2.5 lb. unit	
S-10 Solvent	500 ft. <sup>2</sup>	

<sup>\*\*</sup>Quantities shown are for estimating purposes only. Actual field usage may vary.

# APPLICATION INSTRUCTIONS

#### SURFACE PREPARATION

**Metal:** Metal surfaces must be abrasive blasted to: White Metal, SSPC SP 5 or NACE #1, minimum 3.0 mil profile, and free of grease or other forms of contamination.

# APPLICATION SPECIFICATIONS

Substrate temperature for metal must be between 50°F and 110°F.

Relative humidity must not exceed 90%.

Substrate temperature must be 5°F above the Dew Point.

# PRIMER 67 MIX RATIO (BY VOLUME)

Component A	1 gallon
Component B	1 gallon

#### PRIMER 67 POT LIFE

TEMPERATURE	PRIMER 67
50°F	90 min.
75°F	60 min.
90°F	30 min.

# **PRIMING**

**Metal:** If priming is required mix the pre-measured units of **Component A with Component B**. Prime all metal surfaces to be coated with **Primer 67** at 3-4 mils WFT.

# MIXING AND APPLICATION

It is recommended that the entire contents of the premeasured kit be mixed.

Add the contents of the Hardener to the Base Component container and stir until a uniform consistency is achieved.

Apply to the prepared surface using a stiff brush, plastic squeegee or trowel.

Maximum thickness per coat is approximately 15-20 mils. Recoat material as soon as it is firm to touch (normally 4-6 hours).

If amine blush (oily film) is present wash with warm water and detergent. Dry surface before recoating.

For chemical immersion service allow a minimum 24 hour cure at 75°F. Application of additional heat will shorten cure times.

POT LIFE		
50°F	90 minutes	
70°F	40 minutes	
90°F	15-20 minutes	

#### **CLEANING**

Use S-10 Cleaning Solvent, Acetone or MEK to clean tools and equipment.

# **SHIPPING**

Refer to Material Safety Data Sheets.

#### **STORAGE**

**Warning:** All Dudick products classified by DOT with either white, yellow or red labels must not be mixed or stored together as an explosive reaction can occur.

All products should be stored in a cool, dry area, away from open flames, sparks, or other hazards.

When properly stored in their original, unopened containers, the **Primer 67** components will have a sixmonth shelf life. **Polymer Steel SG** components will have a 12-month shelf life, but *the material is not returnable after 90 days*. Storage in direct sunlight or excessive heat will reduce working time.

# **SAFETY**

M.S.D.S.: Material Safety Data Sheets must always be read before using products. Polymer Steel SG is intended for application by experienced, professional personnel. Dudick, Inc. can supply supervision to help determine that the surface has been properly prepared, the ingredients correctly mixed, and the materials properly and safely applied.

If **Polymer Steel SG** materials are to be applied by your own personnel or by a third party contractor, please be sure that they are aware of the following safety precautions:

 Exposure to resins and hardeners through direct skin contact and/or inhalation may cause severe dermatitis reactions in some people. Cleanliness of the skin and clothing is critical and must be of paramount concern.



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- Fumes are flammable and heavier than air. Proper ventilation should be maintained to minimize breathing of concentrated fumes.
- Suitable respirators should be used during application.
- Safety glasses, gloves, and suitable protective clothing must be worn at all times during application.
- If contact with hardeners occurs, remove any clothing involved and flush the skin with flowing water. Discard the clothing. Do not attempt to wash and reuse it. Polymer Steel SG liquid can be removed with S-10 Cleaning Solvent, MEK, or lacquer thinner.
- Keep open flames and sparks away from the area where materials are being mixed and applied.
- If a rash occurs, remove the individual from the work area and seek a physician's care for dermatitis.
- In case of eye contact, flush with water for at least 15 minutes and consult a physician.
- If swallowed, do not induce vomiting; call a physician immediately.

**NOTE:** Dudick, Inc. ("Dudick") warrants all goods of its manufacture to be as represented in its catalogs and that the manufacture of its products by its employees or subcontractors shall be performed in a workmanlike manner. Dudick's sole obligation under this warranty shall be to replace any material which its examination shall disclose to be defective. Dudick makes no warranty concerning the suitability of its product for application to any surface, it being understood that the goods have been selected and the application ordered by the Purchaser. DUDICK, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED,

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9/21/16