DEVOE COATINGS



# **DEVRAN® 201H**

## **Universal Epoxy Primer**

Cat. # 201F0245/201G0300

## **PRODUCT DESCRIPTION**

**Generic:** Polyamide Epoxy

<u>General Description:</u> A high performance, chemically cured, rust inhibitive epoxy primer for interior or exterior steel, galvanized metal or aluminum surfaces. An excellent holding primer with superior aged recoatability. Also may be used on concrete and masonry.

Typical Uses: Provides excellent adhesion and corrosion resistance for metal substrates such as steel structural members, machinery, equipment, piping and tanks in all industrial environments. May be used for both interior and exterior applications in chemical, fertilizer & power plants, petroleum refineries, pulp and paper mills, water and sewage treatment plants and mining operations. Also an excellent prime coat in the hard service areas public and private institutional, educational, and commercial buildings. Suitable for water immersion when topcoated with an appropriate finish coat.

Product Qualifications				
OTC (Industrial Maintenance)	Yes			
MPI (Category 101)	Yes			
MIL-DTL-24441 (Formula 150)	Performance Alternate			

### **FEATURES**

#### Advantages:

- · Excellent adhesion
- · Excellent holding primer
- · Excellent corrosion resistance
- · Excellent aged recoatability
- · Easy applied by brush, roller, or spray
- · Convenient, light gray color easy to overcoat
- · Formulated without lead, chromate, or mercury containing materials
- · Ideal tie-coat over inorganic zincs
- Versatile for use on most substrates under many different types of toncoats
- Suitable for water immersion when topcoated with an appropriate finish coat

## **SPECIFICATION DATA**

Color: Light Gray (201H0245)

Finish: Flat

Weight/Gallon: 12.0 lbs./gal.(1.44 kg/L)

VOC (EPA 24) (TBAC Exempt): 2.73 lbs./gal.(327 g/L) VOC (EPA 24) (TBAC Non-Exempt): 3.54 lbs./gal. (424g/L)

Thinned 5% with T-10 thinner 3.69 lbs./gal. (443 g/L)

Solids By Volume (ASTM D 2697-7 days): 58% ± 2%

Theoretical Coverage at 1.0 Mil (25 microns) Dry: 930 sq.

ft./gal.(22.9 m<sup>2</sup>/L)

Recommended Film Thickness: 2.0-3.0 mils (50-75 microns) dry – 3.5 – 5.2 mils (89-132 microns) wet. (Make allowances for loss due to overspray & irregular surfaces.)

<u>Systems:</u> Please consult the appropriate system guide, the particular job specification or your sales representative for proper systems using this product. Systems must be selected considering the particular environment involved.

Minimum Dry Time (ASTM D 1640): At 3 mils (75 microns) DFT

Substrate				
Temperature	30°F (-1°C)	50°F (10°C)	70°F (21°C)	80°H (27°C)
Minimum	8 Hours	3 Hours	1 Hour	1 Hour
Recoat				
Dry Hard	>60 Hours	10 Hours	6 Hours	5 Hours
Maximum				
Recoat				
Self	1 Year	1 Year	1 Year	1 Year
Ероху	1 Year	1 Year	1 Year	1 Year
359, 349QC	14 Days	14 Days	14 Days	14 Days
389	14 Days	14 Days	14 Days	14 Days
378, 379	5 Days	5 Days	5 Days	5 Days

Ventilation, film thickness, humidity, thinning, and other factors can influence the rate of dry

Warning: The above table provides general guidelines only. Always consult your sales representative for appropriate recoat windows since the maximum aged recoat time of this product may be significantly shortened or lengthened by a variety of conditions, including, but not limited to humidity, surface temperature, and the use of additives or thinners. The use of accelerators or force curing may shorten the aged recoat of individual coatings. The above recoat windows may not apply if recoating with a product other than those listed above. If the maximum aged recoat window is exceeded, please consult your ICI Paints' Representative for appropriate recommendations to enhance adhesion. Failure to observe these precautions may result in intercoat delamination

<u>Shelf Life:</u> Over 24 months at 70°F (21°C) – unopened <u>Mix Ratio By Volume:</u> 9 (base):1 (converter) – see mixing

instructions.

<u>Induction:</u> 15 minutes – see mixing instructions. <u>Pot Life:</u> 12 hours @ 77°F (25°C) & 50% R.H.



## **PERFORMANCE DATA**

<u>Adhesion:</u> (ASTM D 4541) – Excellent <u>Abrasion Resistance:</u> (ASTM D 4060) – Good <u>Impact Resistance:</u> (ASTM D 2794) – Excellent <u>Humidity Resistance:</u> (ASTM D 4585) – Excellent

Service Temperature Limits: 250°F (121°C) dry. Film may discolor above 140°F (60°C)

Hardness: (ASTM D 3363), 7 day cure @ 77°F (25°C) - F

<u>DANGER! FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED.</u> Read label and Material Safety Data Sheet Prior to Use. See other cautions on last page.

DSF3-0696

#### **GENERAL SURFACE PREPARATION**

Surfaces must be sound, dry, clean, free of oil, grease, dirt, mildew, form release agents, curing compounds, loose and flaking paint and other foreign substances.

New Surfaces: Steel –Best results are obtained over a surface abrasive-blasted to a Near White Blast (SSPC-SP10, ISO-Sa2 1/2). ¹Performance over hand or power-tool cleaned surfaces is dependent on the degree of cleaning. Concrete and Masonry – Cure at least 30 days before painting. pH must be 10.0 or lower. Roughen slick poured or pre-cast concrete by acid etching or sand sweeping. Follow acid manufacturer's application and safety instructions. Rinse thoroughly and allow to dry. Remove loose aggregate. Prime with this product. Galvanized Steel – Allow to weather a minimum of six (6) months prior to coating. Solvent clean per SSPC-SP-1 or clean with DEVPREP® 80 or other suitable cleaner followed by thorough water rinsing, then prime with this product. When weathering is not possible or the surface has been treated with chromates or silicates, first clean by the method intended to be used on the job and apply a test patch of the coating system specified. Allow product(s) to dry and cure at least one week before testing adhesion per ASTM D 3359. If adhesion is poor, brush blast then prime with this product. Aluminum – Remove oils and dirt by solvent cleaning or with DEVPREP 88 or other suitable cleaner

followed by a thorough water rinsing and then prime with this product.

<u>Previously Painted Surfaces:</u> If the old paint is more than 25% failed by rusting, peeling, or flaking, it must be removed and treated as a new surface. If less than 25% has failed, clean the failed areas and spot-prime with this product. Old coatings should be tested for lifting. If they lift, remove them. Scuff sand glossy areas and aged epoxy coatings.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

## DIRECTIONS FOR USE

Tinting: Do not tint.

<u>Thinning:</u> Any solvent addition should be made after the two components are thoroughly mixed. For compliance to VOC regulations, thin as follows: <a href="In TBAC exempt areas:">In TBAC exempt areas:</a> Thinning is not normally required or desired; however, at extreme environmental conditions, small amounts (10% or less by volume) of the TBAC thinner, T-0 or other solvent in compliance with local VOC regulations can be added.

<u>In TBAC non-exempt areas:</u> Thinning is not normally required or desired; however, at extreme environmental conditions, small amounts (5% or less by volume) of T-10 thinner can be added depending on local VOC and air quality regulations.

Mixing: DEVRAN® 201H primer is a two component product supplied in 5 gallon and 1 gallon kits which contain the proper ratio of ingredients. The entire contents of each container must be mixed together. Power mix both portions first to obtain a smooth, homogeneous condition. Then add the converter slowly with continued agitation. After the converter add is complete, power mix at low speed continuously for 15 minutes. Stir thoroughly and scrape sides of can to ensure thorough blending. Pot life at 60-80°F (16-27°C) is twelve hours: if it thickens, do not add thinner, but discard and mix fresh material. Always restir before use. Avoid storing or placing containers in direct sunlight.

Application: Brush (natural bristle), roll (short nap) or spray. No thinning required. For airless spray, use a 0.019-0.025" tip. Adjust pressure as needed. Spray is preferred for appearance and build. Use clean short nap synthetic roller. New rollers should be thoroughly wet with T-10 thinner and spun vigorously to remove loose fibers. Brushing and rolling may require multiple coats to achieve correct film thickness and/or hiding.

**Spreading Rate:** Apply at 310-465 sq. ft. per gallon (7.6-11.4 m²/L) or 3.5- 5.2 mils (89-132 microns) wet. Make allowances for overspray loss and irregular surfaces.

<u>Topcoats:</u> DEVRAN 201H primer can be overcoated with epoxy, urethane, alkyd, or latex coatings. The light gray color permits good coverage with the first finish coat applied.

**Dry Time** (ASTM D 1640): Minimum application temperature is 32°F (0°C). At 77°F (25°C) & 50% R.H. dries to touch in 45 minutes; to recoat with epoxy or urethane, to recoat with conventional alkyd or acrylic latex coatings in approximately 1 hour. Achieves full cure in 7 days at 77°F (25°C). Low temperature, high humidity or poor ventilation will increase these times.

Clean-up: Clean immediately with T-10 thinner.

#### **PRECAUTIONS**

DANGER! FLAMMABLE LIQUID AND VAPOR. CAUSES EYE AND SKIN BURNS. HARMFUL OR FATAL IF SWALLOWED. ASPIRATION HAZARD-CAN ENTER LUNGS AND CAUSE DAMAGE. HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING DIZZINESS, HEADACHE OR NAUSEA. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. OVEREXPOSURE MAY CAUSE BLOOD, LIVER, KIDNEY, DAMAGE. CONTAINS CRYSTALLINE SILICA WHICH CAN CAUSE LUNG CANCER AND OTHER LUNG DAMAGE IF INHALED. CONTAINS MICA WHICH MAY CAUSE PNEUMOCONIOSIS. POTENTIAL CANCER HAZARD. CONTAINS FORMALDEHYDE WHICH HAS BEEN SHOWN TO CAUSE UPPER RESPIRATORY TRACT CANCER AND ALLERGIC RESPIRATORY REACTION. USE ONLY WITH ADEQUATE VENTILATION. KEEP OUT OF THE REACH OF CHILDREN. NOTICE: Products in this series contain solvents. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. For emergency information call (800) 545-2643. Note: These warnings encompass the product series. Prior to use, read and follow product-specific MSDS and label information. Keep away from heat, sparks and flame. Do not smoke. Vapors may ignite. Extinguish all flames, burners, stoves, heaters and pilot lights and disconnect all electrical motors and appliances before use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. If sanding, wear a dust mask to avoid breathing of sanding dust. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. Avoid contact with eyes and skin. If you experience eye watering, headaches, or dizziness, leave the area. If properly used, a respirator may offer additional protection. Obtain professional advice before using. Close container after each use. FIRST AID: For skin contact, wash thoroughly with soap and water. If any product remains, gently rub with petroleum jelly, vegetable or mineral/baby oil then wash again with soap and water. Repeat as needed. Remove contaminated clothing. For eye contact, flush immediately with plenty of water for at least 15 minutes. Get medical attention. If swallowed, get medical attention immediately. If inhalation causes discomfort, remove to fresh air. If discomfort persists or breathing difficulty occurs, get medical attention. KEEP FROM FREEZING. DS443-0108

#### **SHIPPING**

Flash point: 80°F (27°C)

Packaging:1 gallon kit (3.785L)5 gallon kit (18.925L)0.90 gallon base4.50 gallon base

0.10 gallon converter 0.50 gallon converter

**Shipping Weight:** 4 - 1 gallon kits - 52.5 lbs. (23.8 kg) 5 gallon kit - 61 lbs. (27.7 kg)

201H (11/09) Ad Stock #68841A

