DuPont™ 18560S™ Alumistick™ Epoxy Primer

Type

DuPont™ 18560S™ is a chromate-free corrosion-resistant epoxy primer

Description

DuPont™ 18560S™ is a two component non-isocyanate non-sanding primer with superior corrosion resistance and excellent adhesion for direct to aluminum or steel applications. This primer has a ready-to-spray VOC of 0.7 lbs/gal.

Recommended Uses

DuPont™ 18560S™ is recommended for use as a metal treatment for properly prepared aluminum and steel surfaces under DuPont primers. It is not intended for use below the waterline.

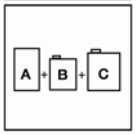
DuPont™ 18560S™ is recommended for use with:

- DuPont™ Corlar® 18510S™ / 18513S™ Epoxy Primer
- DuPont™ Corlar® 18515S™ High Build Epoxy Primer
- DuPont™ 18530S™/18532S™ Urethane Primer

General Information for Use

Components

DuPont™ 18560S™ Alumistick™ Epoxy Primer
DuPont™ 18160S™ Alumistick™ Epoxy Activator

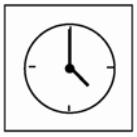


Mix Ratio

Thoroughly mix DuPont™ 18560S™ Alumistick™ Epoxy Primer prior to activation. Combine components and then mix thoroughly.

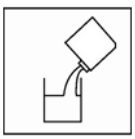
Two Component System	*Parts by Volume*
DuPont™ 18560S™ Alumistick™ Epoxy Primer	2
DuPont™ 18160S™ Alumistick™ Epoxy Activator	1

Viscosity will be 20-22 seconds in a Zahn #2 cup.



Pot Life and Induction Time

Pot life is 12 hours at 70°F (21°C). Approximately 6 hours at 90°F.
Induction time is 15 minutes.



Additives

None recommended

Copyright © 2010 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, The miracles of science™ and all trademarks listed herein with ® or ™ are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates.

Guidelines for Use

Substrates and Surface Preparation

Preferred Preparation: Clean aluminum until water-break free. Remove dirt, waxes, and greases with suitable detergent. Remove salts and other contaminants with fresh water and appropriate cleaners. DA sand aluminum substrate with 80 grit (or sweep blast) until a uniform silver appearance is obtained. Blow all residue from the surface. An alternative preparation is to clean the aluminum surface and treat the aluminum with an appropriate acid etch/ conversion coating (Alodine® 600 for example).

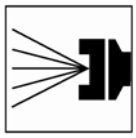
It is recommended that primer be applied as soon as possible to cleaned surfaces to avoid surface contamination.

For steel: Sandblast or grind to clean shiny profile (SSPC SP-10 or equivalent). Blow all residue from the surface. Apply primer promptly to minimize surface oxidation.

Gun Setup

DuPont™ 18560S™ Alumistick™ Epoxy Primer can be applied with conventional and HVLP spray equipment using pressure pot, siphon or gravity fluid delivery.

		Fluid Tip
Conventional		
	Pressure Pot	1.0mm - 1.2mm (.039” - .047”)
	Siphon Feed	1.6mm - 1.8mm (.063” - .071”)
	Gravity Feed	1.4mm - 1.6mm (.055” - .063”)
HVLP		
	Pressure Pot	0.8mm – 1.0mm (.031” - .039”)
	Siphon Feed	1.9mm – 2.1mm (.075” - .083”)
	Gravity Feed	1.4mm – 1.5mm (.055” - .059”)

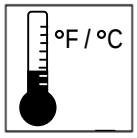


Fluid Delivery

Conventional	12 - 14 oz/min
HVLP	10 - 12 oz/min

Air Pressure

Conventional	30 – 40 psi @ the gun
HVLP	8 – 10 psi @ the gun cap



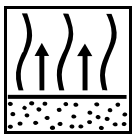
Environmental Conditions

Substrate and ambient temperature must be between 55°F (13°C) and 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%. Heating activated material above 110°F (43°C) may cause gelation.

Application

Apply one medium wet coat. Film build should be 0.8 – 1.2 mils as a non-sanding primer over aluminum. Up to two coats (2.0 – 2.2mils) can be applied, which will slow down dry times. Eight to 10 mils dry film thickness of DuPont Epoxy Primer should overcoat DuPont™ 18560S™ Alumistick™ Epoxy Primer for maximum corrosion protection. DuPont™ 18530S™ Urethane Primer may be used as an intermediate primer. Direct application of topcoat to DuPont™ 18560S™ is not recommended.

Copyright © 2010 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, The miracles of science™ and all trademarks listed herein with ® or ™ are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates.



Dry Times

Air Dry at 70°F (21°C) Dependent upon film builds and ambient conditions

	1 Coat	2 Coats
Dry to nib sanding	30 – 60 minutes	60 – 90 minutes
Dry to over-coating	30 – 40 minutes	50 – 60 minutes

Recoat

DuPont™ 18560S™ may be recoated at any stage of cure. DuPont™ 18560S™ can be topcoated with Corlar® 1851XS™ Epoxy Primer, Corlar® 18515S™ High Build Epoxy Primer, or 18530S™ Urethane Primer within 2 days air dry without sanding. If DuPont™ 18560S™ is baked or air dried longer than 2 days, it must be sanded with P400 – P600 before topcoating.

Recommended Dry Film Thickness

0.8 – 1.2 mils (1 coat)
2.0 - 2.2 mils (2 coats)

Cleanup Solvents

DuPont™ 105™ Thinner or DuPont™ 106™ Thinner

Physical Properties

Ready-to-Spray

DuPont™ 18560S™ Epoxy Primer	*Less Exempts (LE)*	*As Packaged (AP)*
VOC	1.5 lbs/gal	0.7 lbs/gal
Theoretical Coverage	575 ft^2/gal at 1 mil dry film thickness	
Weight Solids	50.2%	
Volume Solids	35.8%	
Gallon Weight	11.8	

Factory-Packaged Primer

Color	Gray
Gloss	Satin
Closed Cup Flash Point	20-70°F (-7 to 23°C)
Shelf Life	2 years (Unopened at 50° – 110°F)

Coating Performance

Adhesion	Excellent
Corrosion Resistance	Very Good
Chemical and Solvent Resistance	Excellent
Humidity Resistance	Excellent

Copyright © 2010 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, The miracles of science™ and all trademarks listed herein with ® or ™ are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates.

Safety and Handling

For industrial use only by professional, trained painters. Nor for sale for use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Do not allow material or overspray to enter drains or waterways.

Revised 8/2010
E-R 4802/K-17695

Copyright © 2010 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, The miracles of science™ and all trademarks listed herein with ® or ™ are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates.