

4500-P-215Y

High Solids Low V.O.C. Chromated Epoxy Primer Yellow

Premium quality high solids epoxy primer formulated for excellent adhesion to prepared aluminum and ferrous metal substrates. This product is predominantly used on aerospace defense and commercial rotocraft platforms.

SPECIFICATION

MIL-PRF-23377, Type I - Class C2

OUTSTANDING CHARACTERISTICS

- Excellent impact resistance
- Excellent flexibility < 1/8" mandrel
- Low V.O.C.
- Tenacious adhesion

PHYSICAL DATA

Finish:	Low Gloss
Colour:	Yellow
Weight Solids:	73.4% +/- 2% mixed
Volume Solids:	60% +/- 2% mixed
V.O.C.	296 grams/liter mixed 2.47 lbs/us gal. mixed
Density:	10.08 lbs/USG/Mixed
Dry Film Weight:	0.0076 lbs/sqft/mil 1.48 g/m ² /μ

RECOMMENDED SYSTEMS

- 9600 Durathane Gloss Polyurethane Enamel. Meets MIL-PRF-85285D, Type I
- 9800 Durathane Semi-Gloss Polyurethane Enamel
- 9700 Durathane Flat Polyurethane Enamel
- 9740 Durathane Flat Polyurethane Enamel



SURFACE PREPARATION

SAE-AMS-QQ-A-250/4 (T3 temper): MIL-C-5541, class 1A (conversion coating_ pretreatment.
SAE-AMS-QQ-A-250/4 (0 temper): MIL-A-8625, type I or IC (anodized) pretreatment
SAE-AMS-QQ-A-250/5 (T3 temper): Deoxidized 1 pretreatment.
SAE-AMS-QQ-A-250/5 (T3 temper): MIL-C-5541, class 1A (conversion coating) pretreatment..

Apply over pretreated metal. On fiberglass-reinforced plastic, a prior coating of primer to MIL-C-8514 will facilitate stripping without damage to the fiberglass.



INSTRUCTIONS FOR USE

Components:	Two
Cure:	4500-C-215
Mix Ratio:	3:1 by volume, Base / Cure
Induction Time:	30 minutes
Pot Life:	4 hours @ 25°C (75°F)
Reducer:	20-4301, 4500-S-81(MIL-T-81772, Type II), 4500-S-81CN (Low MEK Version)



MIXING INSTRUCTIONS

Mix 3:1 by volume Base/Cure. We recommend using a squirrel mixer or equivalent and mix thoroughly for 5 minutes minimum. Allow 30 minutes induction time before using. Mix only sufficient material to use within a 4-hour period. Always add Cure component to Base component - **NEVER THE REVERSE**. Never mix coating or individual component from one vendor with that of another vendor.



SPRAYING VISCOSITY

20-40 #4 Ford Cup



APPLICATION METHOD

Allow for application loss and surface irregularities.

Application: Conventional air spray; HVLP or air assisted airless are recommended for best atomization.

Reduction: Reduce with MIL-T-81772 Ty II or other recommended reducer. In areas where air quality regulations restrict volatile emissions, **DO NOT EXCEED 340g/L (2.8 lb/gal) with thinner (approx 8% by volume).**

RESISTANCE TABLE

Impact Resistance	GE, Model #172 3.6 lbs
Solvent Resistance	>+25 MEK Double Rubs
Hydraulic Fluid Resistance	Passes 24 hour immersion @ 65.5°C ± 2°C (150° ± 5°F) in synthetic hydraulic fluid conforming to MIL-PRF-83282 (Skydrol 500B).
Salt Spray Resistance	> 2000 hours salt spray resistance
Distilled Water	4 days immersion at 49°C (120°F)

SUBSTRATES:

- Aluminum
- Fiberglass - reinforced plastic
- Composite

Note: all physical and chemical resistance tests conducted after one-week cure time at 20-25°C (70-75°F) on properly cleaned substrate.



EQUIPMENT

Air Spray: DeVibiss JGA or MBC gun with "E" needle tip, #704 cap or equivalent. Adjust pressure and fluid delivery for proper atomization.



RECOMMENDED FILM BUILD THICKNESS & COVER RATE

Total Dry Film Recommendation 0.6-0.9 Mils (15-23 microns)
Calculated Coverage at:
1.0 Mils: 976 ft²
25 Microns: 90.7 m²



ENVIRONMENTAL CONDITIONS

Temperature: 15-35°C (59-95°F)
Relative Humidity: 35-75%
Note: Substrate and air temperature must be a minimum of 3°C (5°F) above the Dew Point



DRY TIME

Dry time at 24°C +/-3°C (75°F), 50% relative humidity.
To Touch: 2-2.5 hours
Tack Free: 3.5-4 hours
To Recoat: Min 5 hours < 20 hours
Dry Through: 24 hours
May be forced dried at 60-71°C(140-160°F) for 20-30 minutes
NOTE: Allow 15-30 min flash off before force dry



CLEAN UP

Cleaner: 20-4301, 4500-S-81, 4500-S-81CN, S-10



STORAGE & SHIPPING

Flash Point: 37° C (98.6° F) Setaflash closed cup
Shelf Life: 18 months unmixed
Store in a safe, dry area at a temperature between 5 and 38°C (40 and 100°F). Ensure there are no sparks or possible ignition sources.



SAFETY PRECAUTIONS

Please refer to the Safety Data Sheet (SDS) for information regarding health, physical and environmental hazards, handling precautions and recommended first aid procedures. For industrial and automotive use only. Spray equipment must be adequately grounded.