TECHNICAL DATA SHEET

MIL-DTL-24441 (REVISION D)
FORMULA 151 THROUGH 158, TYPE-III
EPOXY-POLYAMIDE TOPCOAT

1. MIL-DTL-24441/21B Formula 151, Haze Gray,
2. MIL-DTL-24441/22B Formula 152, White
3. MIL-DTL-24441/23B Formula 153, Dark Gray RO 1.8
4. MIL-DTL-24441/24B Formula 154, Dark Gray RO 3.6
5. MIL-DTL-24441/25B Formula 155, Dark Gray RO 6
6. MIL-DTL-24441/26B Formula 156, Red
7. MIL-DTL-24441/27B Formula 157, Gray No. 50
8. MIL-DTL-24441/28B Formula 158, Yellow

DESCRIPTION/CONFORMANCE: These are two-part Epoxy-Polyamide, VOC Compliant Coatings specifically formulated for painting particular areas aboard ships such as bridges, exterior under water hull. These coatings are also suitable to be used as topcoats for exterior and interior application on aircrafts and ground support system. These paints conform to Federal Specification MIL-DTL-24441 Type III (Revision D) for the Formulas shown above.

PRINCIPAL CHARACTERISTICS:
-Can be applied up to 5.0 Mils DFT.
-Excellent resistance to weather, moisture, petroleum products and mild chemicals.
-Good impact resistance

COLOR AND FINISH: As per Formula No., Satin to Semi-Gloss Finish
MASS DENSITY: 11.0 ± 0.5 lbs./gal.
SOLIDS BY VOLUME: Approx. 63 ± 2%
VOC (BEFORE THINNING): 2.80 lbs./gallon, 340 g/l

TECHNICAL DATA

THEORETICAL SPREADING RATE:
@ 1 MIL DFT: Approx 1,000 sq. ft. /gal.
RECOMMENDED DRY FILM THICKNESS:
TOUCH DRY (25 ºC/77ºF): 2-3 Hrs.
DRY HARD (25 ºC/77ºF): 6-8 Hrs.
MIN. INTERVAL BEFORE OVERCOATING(77ºF): 8 Hrs. at 3-4 Mils DFT
MAX. INTERVAL BEFORE OVERCOATING: 7 Days
FULL CURE AFTER: 7 Days
TEMPERATURE RESISTANCE (DRY): 250ºF (121ºC)
SHELF LIFE (COOL & DRY PLACE): Subject to re inspection after 12 months.
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FLASH POINT (TCC):  
Base 96ºF (36ºC)  
Hardener 108ºF (42ºC)

PACKAGING: A two-component material with base and curing agent supplied in 1 and 5-gallon containers (2-Gallon Kit & 10-Gallon Kit.). Mix ratio is 1 to 1 (equal volumes).

RECOMMENDED SUBSTRATE CONDITIONS:  
Steel: Properly Primed substrate with Zinc Rich Epoxy or Epoxy Polyamide Green Primer, Formula-150. The surface must be perfectly dry.

MIXING & INDUCTION TIME REQUIREMENT:  
During application and the first 24 hours of curing, the substrate temperature must be above 41ºF (5ºC) and at least 5ºF (3ºC) above the dew point. The temperature of the mixture of base and hardener during mixing and application should be above 59 ºF (15ºC), otherwise more solvents must be used to obtain application viscosity. This results in lower sag resistance and slower cure. If thinner is used (Only Use MIL-T-81772 Type II Epoxy Thinner), it should only be added after mixing the components. Using the proportion of 1:1 of Component A to Component B, do the following: Agitate Component A by itself with a hand spatula, and then slowly pour in Component B (Hardener/Activator) and mix till mixture is smooth and uniform. At a temperature range of 70ºF – 80ºF, let mixture stand for 15 - 20 minutes after mixing both components and before application. Colder temperatures will require a longer induction time.

POTLIFE:  
4 Hours At 73ºF

CONVENTIONAL SPRAY  
Manufacturer: DeVilbiss  
Gun Model: MBC or JGA #18 or #62  
Tip-Air Cap Combination: 704E 66PE  
Fluid hose should by 3/8” I.D. with a maximum length of 50 feet. Pot should always have dual regulation and be kept at same elevation as spray gun.
MIL-DTL-24441 (REVISION D)
FORMULA 151 THROUGH 158, TYPE-III
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AIRLESS SPRAY
Manufacturer: Graco  Binks  DeVilbiss
Gun Model: 205-590  Model 500  JGN-501
Pump: Bulldog  Mercury 5C  QFA-519

Hose should be 3/8” I.D. minimum, but ¼” whip end section may be used for ease of application. A maximum length of 100 feet is suggested. Best results will be obtained using a .018”-.021” tip at 2400-2700 p.s.i.

THINNING REQUIREMENT:
- Recommended Thinner: T-81772 Type II Epoxy Thinner
- Airless Spray: 0-10% by Volume
- Conventional Spray: 5-15% by Volume
- Roller And Brush: 0-5% by Volume
- Clean-up Thinner: T-81772 Type II Epoxy Thinner

CAUTION:
Contains flammable solvents. Keep away from sparks and open flames. Use only grounded explosion proof equipment in accordance with the National Electric Code. Workmen must use nonferrous tools, wear non-conductive and non-sparking shoes in areas where explosion hazards exits.
In confined areas, workmen must wear fresh airline respirators, protective clothing and gloves. Avoid contact with skin, breathing of vapor or spray mist ingestion. Keep out of reach of children.

NON-WARRANTY:
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