PRODUCT INFORMATION DATA SHEET

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01R051 (01-R-51)
GMS 5006 TYPE I
FED STD COLOR 11136
HIGH SOLIDS EPOXY TOPCOAT

Product Information

Specification: **GMS 5006 TYPE I**

Description: Chemically cured, two-component, epoxy topcoat intended for use on aircraft and aerospace equipment.

Features:
- When used over properly applied Commercial or Military primers, it provides excellent adhesion and flexibility.
- Resistant to hydraulic fluids, lubricating oils and water.
- Provides excellent chemical resistance to solvents,

Color: **FED STD 595B # 11136 Gloss Red**

Reducer/Thinner: None required.

Mix Ratio 3:1 by parts by volume
3 parts 01R051 base component to
1 part 80X104A catalyst component

Kit size	01R051 base	80X104A catalyst
QK	1 can filled @ 24 oz / 710 ml	1 can filled @ 8 oz / 237 mL

Pot Life: 4 hours at 70° ± 10°F, 50 ± 10% R.H.

Viscosity: initial: 18 – 25 sec # 2 Zahn Cup
4 hours: 35 sec max, # 2 Zahn Cup

Induction Time: 30 minutes

Application Thickness: 1.7 – 2.3 mils dry film thickness

Storage stability: 1 year when stored indoors between 35 – 115°F in original unopened containers.

Characteristics*

Characteristics	Base	Catalyst **	Admixed
Weight per gallon (± 0.2 lbs)	9.13	9.3	9.16
% Solids by weight	61.6%	35.8%	53.6%
% Solids by volume	51.4%	39.4%	48.5%
Coatings VOC (g/L)	420	362	410
Coatings VOC (lbs/gal)	3.5	3.0	3.42
Material VOC (g/L)	410	233	366
Material VOC (lbs/gal)	3.42	1.9	3.05

Dry Film Density*:** 1.21 g/cc
Theoretical Coverage per gallon: 779sq. ft.

Theoretical Dry Film Weight (per gallon kit as applied):
2.86g/sq ft (0.00630lbs/sq. ft.)

* Characteristics are calculated based on product formulas and ingredient characteristics as reported to Deft, Incorporated by raw material suppliers. Values reported are not specification values. They are presented for general information only.
** Catalyst component contains VOC exempt solvents.
*** Dry film density, theoretical coverage and dry film weight is based on proper application of coating at 1 mil dry film thickness and 100% transfer efficiency.

Dry Times

Dust Free: 2 hours, max **Dry Through:** 9 hours, max
Tack Free: 4 hours, max **Full Cure:** 14 days

Note: Dry times above were established at room (ambient) temperatures, 73° ± 4°F and 50% ± 10% Relative Humidity.

Forced Dry Schedule

For dry to stack conditions only. Allow a minimum of 30 minutes flash off time at ambient temperatures* prior to exposing painted parts to high temperatures. Complete testing should be done prior to use. Below are suggested starting points. Other variables may affect these cure schedules.

Temperature	Time
120°F	45 minutes
140°F	30 minutes
160°F	20 minutes
180°F	15 minutes

*Ambient temperatures are defined as 70° ± 10°F and 50% ± 10% Relative Humidity.

Mixing and Thinning

Thoroughly stir or shake the base component (Part A) before combining to ensure all solids are completely dispersed. Add one volume of catalyst component (Part B) to the three parts of base component (Part A). Do not use the catalyst component (Part B) from another color. Mix by hand stirring, paint shaker or mechanical mixing to ensure the base/catalyst mixture is homogeneous. **DO NOT SHAKE OR MECHANICALLY MIX MATERIAL FOR LONGER THAN 10 MINUTES.** Thinners are not required for the mixed material. If the addition of a thinner is necessary, MIL-T-81772B Type II* (IS-237) is available. Do not add thinner to attempt to compensate for coatings beyond its useful pot life.

*Use only if needed and if local and state VOC limits allow.

Application & Equipment

Coating may be applied over properly cleaned composite surfaces, epoxy primer coatings. Apply the topcoat using two coats to a total dry film thickness of 1.7 – 2.3 mils. Apply the first coat as a light (mist) coat. Allow the coat to set for at least 15 minutes (depending on airflow, temperature and humidity) before applying the second coat to permit solvent evaporation. Apply the second coat in a full wet coat to achieve the desired film thickness. Conventional, Air, Air Assisted Airless, HVLP, Electrostatic spray equipment may be used to apply this material. For your application, please contact the equipment manufacturer for more specific information on Conventional, HVLP or Electrostatic spray applications, and recommendations on hose diameter and lengths.

Packaging, Yields, Shipping Weight

This material is available in the follow kit sizes:

Kit size	Approx. Yield (Mixed)	Approx. Shipping Weight
QK	1 quart	3.5 lbs (1.6 kg)

Additional kit sizes are available upon request.

Equipment Cleanup

IS-237 Epoxy Reducer (MIL-T-81772B Type II) may be used for general clean up of parts and equipment before coating has fully cured and is still in a liquid state. Once material is fully cured, use an approved chemical paint removal system to strip off coating.

Safety

Refer to the product label or Material Safety Data Sheet (MSDS) for each component for Personal Protective Equipment and Proper Handling.