

TECHNICAL DATA

Desothane® HS Polyurethane Topcoats/CA 8000 Series

Description

Desothane® HS topcoats are VOC compliant, polyurethane, chemically cured topcoats used to protect the exterior of aircraft. These topcoats are designed to be applied over conventional as well as high solids epoxy primers to provide maximum performance.

Desothane® HS topcoats have excellent durability against weathering, excellent appearance, and are easy to apply in a variety of environmental conditions including high temperature and humidity. Desothane® HS topcoats are compatible with all current spray equipment. For further details on application parameters, consult the Desothane® HS topcoats/CA 8000 series application guide or contact your local PPG Aerospace Application Support Center.

Desothane® HS polyurethane topcoats/CA 8000 series are qualified to the following OEM specifications:

- AIMS 04-04-013
- BAMS 565-002
- BMS 10-60 Type II Class B Grade D
- BMS 10-72 Type VIII
- DHMS C4.04
- DMS 2143
- DPM 6456

Desothane® HS topcoats are compatible with the following primers:

- BMS 10-72 Type VIII
- BMS 10-79
- DMS 2104

Application Properties (Typical)

Volatile organic compound (VOC),	
EPA method 24, mixed system	420 g/l max.
Mix ratio (by volume)	
Gloss	
Base - CA 8000/XXXXX*	2 parts
Activator - CA 8000B	1 part
Thinner - CA8000C	1 part

Note: Thinner available in 6 types based on dry time requirements: CA 8000C, CA 8000C1, CA 8000C2, CA 8000C3, CA 8000C4, CA 8000C5

Semi-gloss	
Base - CA 8020/XXXXX*	2 parts
Curing solution - CA 8020D	1 part

Flat	
Base - CA 8010/XXXXX*	2 parts
Curing solution - CA 8010D	1 part

Note:* Denotes color description

Viscosity, Zahn #2 cup	
Fresh mixed	18 to 22 sec.
Pot life (see chart below)	26 sec. max.
#4 Ford cup	
Fresh mixed	8 to 14 sec.
ISO - 3M cup	
Fresh mixed	30 to 37 sec.

Drying times and Pot life @ 77°F (25°C)

	Wet Edge (min)	Time Between Coats (min)	Dry-to-Tape (hrs)	Potlife (hrs)
CA 8000C	30-45	45-60	8-12	3
CA 8000C1	15-30	30-45	5-7	2
CA 8000C2	10-15	20-30	3-4	1
CA 8000C3	8-12	15-20	1.5-2.5	45 min
CA 8000C4	3-5	10-15	1.0-1.5	30 min
CA 8000C5	2-4	7-13	0.75-1.0	20 min

Dry to fly (depending on thinner)	6 - 72 hours
Full cure	7 days

Dry film density - 0.0075 ± 0.001 lbs/ft² @ 1.0 mil dry film (36.6 ± 5 g/m² @ 25 microns dry film)

Theoretical coverage - 825 ± 50 ft²/gal @ 1.0 mil dry film (20 ± 1.2 m²/l @ 25 microns dry film)

Recommended dry film thickness - 2.0 to 3.0 mils (50 to 75 microns)

Spray equipment
Compatible with all forms of spray equipment

Color - Available in a variety of colors

Shelf life from date of manufacture:
24 months to PRC-DeSoto Standard
12 months to BMS 10-60 & BMS 10-72

Desothane® HS Polyurethane Topcoats/CA 8000 Series

Performance Properties (Typical)

Service temperature -65°F to 350°F (-54°C to 177°C)	Conforms
Pencil hardness HB minimum	2H
Low temperature flexibility Conical mandrel	Conforms
UV-CON 300 hrs - GE-60%	Conforms
Impact resistance 80 inch/pounds	Conforms
Fluid resistance BMS 3-11 (LD-4), 30 days @ 75°F (23.9°C)	H pencil
MIL-H-5605 hydraulic fluid	2H pencil
MIL-L-7808 oil	2H pencil
TT-S-735 Type III fluid	2H pencil
Distilled H ₂ O	Conforms
Weather resistance QUV 3000 hours	88 units of gloss
UV-CON 3000 hours	88 units of gloss
1 year in Florida	90 units of gloss
Corrosion resistance 1000 hours salt spray, Filiform/BSS 7258 Type I	Conforms Conforms
Luster, 60 degree Gloss	90 units minimum
Semi-gloss	15-45 units
Flat	5 units maximum
Erosion resistance Whirling arm	Conforms

Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Storage Life

Inspect the condition of the container to ensure compliance to FED-STD-141, Method 3011.1. The material should be stored at temperatures between 40°F to 100°F (4.4°C to 37.8°C) to ensure shelf life.

Desothane is a trademark of PRC-DeSoto International, Inc., registered with the U.S. Patent Office.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

Printed in U.S.A.

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Material Safety Data Sheet (MSDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An MSDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at:
www.ppgaerospace.com

For sales and ordering information call
1-800-AEROMIX (237-6649).

PRC-DeSoto International, Inc.
12780 San Fernando Road
Sylmar, CA 91342
Telephone (818) 362-6711
Toll Free (800) AEROMIX
www.ppgaerospace.com

Issue Date: 02/10
Supersedes: 11/09
Lit: 0559