Technical Data Sheet

Tempo Aerospace Inc. Tel: 416.746.2233 Fax: 416.746.2235

Revised August 2013

7800/6800/4800 Lines

Durathane – Semi-Gloss Finish

7800/6800/4800 Lines are aerospace grade aliphatic polyurethane formulations with exceptional durability and physical properties. Durathane Gloss Finishes are used on both commercial and defense platforms.

Specification

D-12-003-001/SF-000, Class III
MIL-C-83286
BAMS 565-002 CL.A, GR.A
DHMS C4.04 Type 2
DHMS C4.04 Type 4

Outstanding Characteristics

- Excellent Adhesion
- Remarkable flexibility
- Outstanding solvent resistance
- Superb corrosion and UV resistance

Physical Data

Finish:	Semi-Gloss
Colour:	Full range of industrial and Fed. Std. Colours
Weight Solids:	45-58%
Volume Solids:	40+/-4%
V.O.C.:	>420 g/L
Density:	Varies with colour
Dry Film Weight:	0.0081 lbs/ft²/mil 1.58g/m²/µm (varies with colour)

Recommended Systems

• 4500-P-23B	DHMS C4.01 Ty. 2
• 4500-P-23G	BAMS 565-001
• 4500-P-15Y	MIL-P-23377

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

Surface Preparation

These products are designed to be applied over properly prepared and primed substrates. Primed surfaces should be coated within 2-48 hours or a light sanding (#400 grit) and solvent wipe with MEK using a clean cotton cloth should be done.

Durathane Gloss Finish can be used direct to metal however only in industrial settings where optimal performance is not required

Instructions for Use

Components:	Two
Activator:	C-1
Mix Ratio:	1:1 by volume, Base/Activator
Induction Time:	15-30 minutes
Pot Life:	8 hours @ 25°C (75°F)
Reducer:	S-1 or 4600-S-72 (MIL-T-81772 Ty. I)

Mixing Instructions

Mix 1:1 by volume Base/Activator thoroughly. Allow 15-30 minutes induction time before using. Mix only sufficient material to use within the specified pot life. Always add reducer to the mixed product (base + activator), never the opposite.

Spraying Viscosity

Recommended spray viscosity 19-26 seconds, EZ Zahn Cup #2

Reduce product at room temperature to the desired spray viscosity for your application equipment.

Application Method

Allow for application loss and surface irregularities.

Application:	Conventional or HVLP

IMPORTANT - The information contained in this data sheet pertains to material currently offered and represents the results of laboratory evaluation and is intended as a guide. Since the customer's application requirements are not under our control, Tempo Aerospace Inc. cannot make any warranties or guarantees for the results obtained.

Technical Data Sheet

Tempo Aerospace Inc. Tel: 416.746.2233 Fax: 416.746.2235

Revised August 2013

7800/6800/4800 Lines

Resistance Table

Impact Resistance	7800 40 inch pounds forward 30 inch pounds reverse 6800 60 inch pounds forward 30 inch pounds reverse
Hardness	Pencil Hardness F minimum
Fuel Resistance	Withstands immersion of Jet A1 Fuel for 14 days at ambient temperatures without showing any defects. After a 24 hour recovery period, the primer regains its pretest hardness
Lubricating Oil Resistance	Withstands immersion in lubricating oil at 25°C for 14 days without showing any softening, blistering, or loss of adhesion
Hydraulic Fluid Resistance	Withstands immersion in Skydrol hydraulic fluid without showing any defects after 30 days
Salt Spray Resistance	With a scribed film at an angle of 6°, it exhibits no blistering, lifting of the primer, or substrate corrosion after exposure to 5% salt spray following ASTM B117 on treated aluminum substrate 3000 hours
Water Resistance	No blistering or loss of adhesion after 14 days immersion in distilled water at ambient temperature. Regains its pretest hardness after a recovery period of 24 hours

Substrates:

Adheres well to a number of properly prepared substrates:

- Aluminum
- Steel
- Galvanized
- Previously painted surfaces

Equipment

Using a Binks Mach I HVLP with a 93P or 92AP air cap and a #92 Fluid tip, inlet pressure should be approximately 70-80 PSI (9 PSI at air cap) and 10-12 PSI on pressure pot. Accuspray 19 or 10 series HVLP, use a #43 fluid tip and needle with a # 5 or # 8 air cap with approx 5-9 PSI at the tip. Devilbiss JJ502 conventional spray gun uses a 765-air cap and a .0425 needle nozzle with 45-55 PSI gun pressure and 10-12 on pressure pot.

Recommended Film Build Thickness & Cover Rate

Total Dry Film Recommendation 1.8 – 2.2 Mils (45-55 microns)
Calculated Coverage at:

1.0 Mils:	700 ft²
25 Microns:	65 m²

Environmental Conditions

Temperature:	15-35°C (59-95°F)
Relative Humidity:	10-80%

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.

Tack Free:	<4 hours
To Recoat:	30 minutes - < 24 hours
Dry Through:	8 hours max

May be forced dried at 60-71°C(140-160°F) for 20-30 minutes After flash off of 15-30 minutes

Clean Up

Cleaner: 20-4301, S-10 or S-1

Storage & Shipping

Flash Point:	Refer to MSDS
Shelf Life:	12 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 Material Safety Data Sheet (MSDS) for information regarding health, physical and environmental hazards, handling precautions and recommended first aid procedures. For industrial and automotive use only.

IMPORTANT - The information contained in this data sheet pertains to material currently offered and represents the results of laboratory evaluation and is intended as a guide. Since the customer's application requirements are not under our control, Tempo Aerospace Inc. cannot make any warranties or guarantees for the results obtained.