9740-Line DURATHANE FPX

FLAT HIGH SOLIDS POLYURETHANE - LOW HAPS

9740 Line is a premium quality aliphatic polyurethane formulated to provide strong mechanical properties and is enhanced with fluoropolymer for extended weathering durability and exceptional colour retention.

Specification

MIL-PRF-85285 TYPE IV Class H
MIL-PRF-85285 TYPE I Class H

Outstanding Characteristics

- Extended exterior durability
- Excellent flexibility
- Superior solvent and chemical resistance
- Low HAPS & V.O.C.

Physical Data

Finish:	Flat
Colour Type IV:	Contact for List
Colour Type I:	All, except fluorescent
Weight Solids:	55.0 ± 3% mixed
Volume Solids:	44.0 ± 2% mixed
V.O.C.	≤420 g/lt
Density:	N/A

Recommended Primers

- 4500-P-215Y MIL-PRF-23377 Ty. I, Cl C2
- MIL-PRF-23377 Ty II, CL C2
- MIL-PRF-85582
- MIL-DTL-53022 (Ferrous metals)

Note: all physical and chemical resistance tests conducted after 14 day cure time at 20-25°C (70-75°F) on properly cleaned substrate.

Surface Preparation

Aluminum: Clean with acid based cleaner or other appropriate cleaner depending on contamination. Pretreat with conversion coating MIL-DTL-5541, Class 1A, wash primer DOD-P-15328 or anodize per MIL-A-8625

Instructions for Use

Components:	Two
Activator:	9740-C-2
Mix Ratio:	3:1 by volume, Base / Activator
Induction Time:	N/A
Pot LIfe:	4 hours @ 25°C (75°F)
Reducer:	9600-S-1 or 4600-S-72 (MIL-T-81772 Ty I)

Mixing Instructions

Mix 3:1 by volume Base/Activator thoroughly. 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 20 - 30 seconds #4 Ford Cup

Reduce with 9600-S-1 or thinner conforming to MIL-T-81772 TY.1 when required by contract. In areas where air quality regulations restrict volatile emissions, do not exceed 420 g/L (3.5 lb/gal) with thinner (approx 5% by volume).

Application Method

Allow for application loss and surface irregularities.

Application:	Conventional air spray, HLVP or air assisted airless are recommended for best atomization.

Technical Data Sheet

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Resistance Table

GE Impact	Passes 40% elongation
Cold Flexibility (-51°C/-60°F)	No cracking over 2 inch mandrel
Lubrication Oil (MIL-L-23699)	24 hours @ 121°C(250°F)
Hydraulic Fluid (MIL-PRF-83282)	24 hours @ 66°C (150°F)
JP-% Fuel (MIL-DTL-5624)	7 Days @ room temperature
Skydrol 500B	30 days @ room temperature
Solvent (methyl ethyl ketone)	25 double rubs
Heat Resistance	121°C (250°F) for 1 hour
D.I. Water (Immersion)	24 hours @ room temperature, adhesion
Humidity	30 days @ 49°C (120°F), 100% RH
Weathering (ASTM G155)	3000 hours Xenon Arc

Chemical and solvent resistance tests conducted after 14 day cure @ 70-75°F.

Equipment

Conventional:	1.3-1.5mm tip 45-60 PSI air pressure
HLVP:	1.3-1.5mm tip 10 PSI at the cap

Recommended Film Build Thickness & Cover Rate

Total Dry Film Recommendation 1.7-2.3 mils (43-58 microns)
Calculated Coverage (#36375) at:

1.0 Mils:	Up to 707 sq.ft/US gallon
25 Microns:	Up to 17.4 m² / Litre

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 25°C (75°F), 50% relative humidity

To Touch:	1.0-1.5 hours
Tack Free:	3.0-5.0 hours
To Recoat:	2-24 hours
Hard:	12 hours

Clean Up

Cleaner:	20-4301, 4600-S-1 or 9600-S-1

Storage & Shipping

Flash Point:	Please refer to MSDS
Shelf Life:	24 months unmixed

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.