

# BOMBARDIER

Toronto (de Havilland)

**PROPRIETARY INFORMATION**

# PPS 16.24

**PRODUCTION PROCESS STANDARD**

## APPLICATION OF DSC 216 FLUOROCARBON DISPERSION COATING

- Issue 3
- This standard supersedes PPS 16.24, Issue 2.
  - Vertical lines in the left hand margin indicate changes over the previous issue.

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## 1 SCOPE

- 1.1 This Production Process Standard (PPS) specifies the procedure and requirements for the application of DSC 216-1 (Teflon) coating.
  - 1.1.1 This PPS complements the engineering drawings that specify its use as an authorized instruction. The procedure specified in this PPS must be followed to ensure compliance with all applicable specifications. In general, if this PPS conflicts with the engineering drawing, follow the engineering drawing. The requirements specified in this PPS are necessary to fulfil the engineering design and reliability objectives.
  - 1.1.2 Refer to [PPS 13.26](#) for the subcontractor provisions applicable to this PPS.
  - 1.1.3 Procedure or requirements specified in a Bombardier BAPS, MPS, LES or P. Spec. **do not** supersede the procedure or requirements specified in this PPS. Similarly, the procedure and requirements specified in this PPS are not applicable when use of a BAPS, MPS, LES or P. Spec. is specified.

## 2 HAZARDOUS MATERIALS

- 2.1 Before receipt at Bombardier Toronto (de Havilland), all materials must be approved and assigned Material Safety Data Sheet (MSDS) numbers by the Bombardier Toronto (de Havilland) Environment, Health and Safety Department. Refer to the manufacturer's MSDS for specific safety data on any of the materials specified in this PPS. If the MSDS is not available, contact the Bombardier Toronto (de Havilland) Environment, Health and Safety Department.

## 3 REFERENCES

- 3.1 [PPS 13.13](#) - Personal Protective Respiratory Equipment.
- 3.2 [PPS 13.26](#) - General Subcontractor Provisions.
- 3.3 [PPS 13.28](#) - Storage Life of Adhesives, Sealants, Paints and Composite Products.
- 3.4 [PPS 31.17](#) - Solvent Usage.

## 4 MATERIALS AND EQUIPMENT

### 4.1 Materials

- 4.1.1 DSC 216-1 fluorocarbon dispersion coating, aerosol can or 5 gallon pail.

### 4.2 Equipment

- 4.2.1 Suitable paint spraying equipment.

4.2.2 Adhesive tape, masking, 1 inch wide, 3M Co. or equivalent.

4.2.3 Protective wrapping paper, brown Kraft paper or equivalent.

## **5 PROCEDURE**

### **5.1 General**

5.1.1 DSC 216-1 fluorocarbon dispersion coating is a Teflon-filled spray to be used in the following applications, if specified on the engineering drawing:

- Protection of sealed areas from attack by fluids such as fuel, lubricating oil or hydraulic fluid.
- Release agent for removable parts incorporating formed-in-place gaskets.
- Release agent for forming tools (liquid shims, etc.) to prevent bonding of tools to finished parts.

### **5.2 Preparation of Surfaces**

5.2.1 Solvent clean surfaces according to [PPS 31.17](#).

5.2.2 Mask all adjacent aircraft surfaces within 24" of areas to be sprayed using Kraft paper and masking tape to prevent overspray from settling on these surfaces.

5.2.2.1 Take extreme care to avoid overspraying adjacent surfaces, since the Teflon spray will prevent the adhesion of paints and sealants to contaminated areas.

### **5.3 Application of DSC 216-1 Coating**

5.3.1 The coating may be applied from an aerosol can or using spraying equipment.

5.3.1.1 When using the aerosol spray, shake the can for approximately 1 minute immediately before intended use.

5.3.1.2 When using a spray gun, adjust nozzle to achieve a spray strip of 2" of 3" wide.

5.3.2 To apply the coating, maintain a distance of 10" to 12" between the work and the can or spray gun nozzle.

5.3.3 Apply one thin coat, allow 5 minutes drying time and spray a second coat.

5.3.3.1 Sprayed parts may be handled as soon as the solvent has flashed off (approximately 5 minutes).

5.3.4 Take care to apply only light coats to prevent runs or sags, since dried "Teflon" coating cannot be chemically removed with solvents.

## 5.4 Clean-Up

- 5.4.1 On completion of spray application, clean the spray can nozzle by inverting the can and depressing the nozzle for a few seconds.
- 5.4.2 Thoroughly rinse and flush through spray gun and fluid lines with the solvent specified in [PPS 31.17](#) immediately on completion of the spraying operation.

## 6 REQUIREMENTS

- 6.1 The coating must be uniform in appearance with no evidence of runs or sags.

## 7 SAFETY PRECAUTIONS

- 7.1 *Observe general shop safety precautions when performing the procedure specified herein.*
- 7.2 *Refer to [PPS 31.17](#) for the safety precautions for handling and using solvents.*
- 7.3 *The operator must wear protective respiratory equipment according to [PPS 13.13](#) when spraying fluorocarbon dispersion coating.*
- 7.4 *Only spray the "Teflon" coating in well ventilated areas and all personnel not directly involved in the application must stand at least 10 feet clear of the spraying operation.*

## 8 PERSONNEL REQUIREMENTS

- 8.1 Personnel responsible for the application of DSC 216-1 (Teflon) coating must have a basic understanding of the procedure and requirements as specified herein and must have exhibited their familiarity to their supervisor.

## 9 STORAGE

- 9.1 Refer to [PPS 13.28](#) for the storage life of DSC 216-1 (Teflon) coating.