



Technical Bulletin

VDX Dry Lubricant Spray

Introduction

Aerosol packaged VDX Dry Lubricant Spray is a medical-grade Polytetrafluoroethylene (PTFE) micro dispersion lubricant. This spray-applied lubricant dispenses in a precise spray pattern ideal for spot-lubrication of springs, hinges, and mechanical pinch points in medical device assemblies. VDX provides a low cost, non-migrating inert coating that imparts ultra-low friction surfaces and eliminates sticking problems common in low-speed, light-load mechanical assemblies.



- Dry Lubricant film will not attract dust or dirt
- Nonflammable for maximum safety
- Oil free, non-migrating/non-staining, does not contain silicone
- High-performance PTFE lubricant
- Excellent for high temperature applications up to 500 °F (260 °C)
- Safe on most surfaces, plastic safe
- Provides excellent lubrication

Product Information

VDX Dry Lubricant Spray is a PTFE surface treatment. It offers many important benefits:

- Low cost convenient aerosol dispensing
- Imparts a low coefficient of friction of 0.06
- ISO 10993* tested and certified
- Factory calibrated PTFE content for consistent results
- Nonflammable handling in storage and use
- No special equipment requirements
- Hostile to bioburden issues
- Compatible with ETO and radiation sterilization processes.
- Oil free; non-migrating/non-staining
- Excellent materials compatibility; plastic-safe
- Fast drying with minimal odor

Physical & Chemical Properties

Odor	Slight Ethereal
Solubility in Water	Not Soluble
% Volatile by Weight (Carrier)	100
Lubricant Coefficient of Friction	0.06
PTFE Particle Size Average Bulk Average Mean	1-15 (microns) 3.7 (microns)
Carrier Evaporation Rate (Ether = 1)	>1
Flash Point	Not Flammable
ISO 10993* Tested and Certified	Yes

** Contact MicroCare Medical for specifics regarding ISO 10993 certification.*

Environmental

VDX Dry Lubricant Spray formula is accepted by the U.S. Environmental Protection Agency (EPA) under the Significant New Alternatives Policy (SNAP) Program. Contact *MicroCare* for details related to EU REACH compliance requirements.

Application Methods

Formulated specially for medical device assembly and component uses, the aerosol packaged VDX Dry Lubricant is ready-to-use and calibrated with a concentration of PTFE optimized for most lubrication needs. Normal precautions (safety glasses, etc.) should be used when using this product. See product SDS prior to use for full details on health and safety. Treated surfaces should be clean and dry prior to application of the lubricant. To ensure the lubricant dispenses uniformly when sprayed, shake the can aggressively prior to each use. Hold the can 2 - 3 inches (5 - 8 cm) from the surface to be treated. For best results, apply a thin mist. The coating dries in seconds and can be seen on the part as a wax-like coating. A single treatment is adequate for most applications.

Contact *MicroCare* for details on alternative application methods including manual and automated liquid dipping, wiping, brushing or spraying.

Heat Treatment

Coated parts can be heat treated for greater coating durability. Heat-treatment offers enhanced durability by melting the coating onto the substrate of the part. The process is simple and involves heating the part surface to 300-315 °C (575-600 °F). Measure the surface temperature directly with a thermocouple. The coating appearance may change from opaque white to a darker translucent surface and finally appear clear wet. Maintain the surface temperature of the coated part (not the temperature of the ambient air) at recommended temperature for 5 - 10 minutes. If a white residue remains, buff with a soft cloth after cooling. No further treatment is required.

Packaging and Availability

Packaging	
Aerosol ¹ - 12 oz / 340 g	MCC-VDX
Aerosol Packaging	12 cans / box
Shelf Life	Unlimited
Recycle	

Note: Products sold by weight, not volume.

One-gallon and smaller sample containers are available upon request.

Making Your Devices Better

www.MicroCareMedical.com

MicroCare Corporation

595 John Downey Drive
New Britain, CT 06051 USA
CAGE: OATV9
Tel: +1 860 827 0626
Toll Free: 1 800 638 0125
Email: TechSupport@MicroCare.com

MicroCare Europe Bvba

Vekestraat 29 B11
Industriezone 't Sas
1910 Kampenhout, Belgium
Tel: +32 2 251 95 05
Fax: +32 2 400 96 39
Email: EuroSales@MicroCare.com

MicroCare Asia Pte Ltd

102E Pasir Panjang Road
#03-01 Citilink Warehouse Complex
Singapore 118529
Tel: +65 6271 0182
Email: TechSupport@MicroCare.sg