



MicroCare™ Universal Carrier Fluid

Product Information

MicroCare Universal Carrier Fluid is a custom formulated, nonflammable, carrier fluid formulated specifically for deposition use with Dow Corning™ 360 Medical Fluids (polydimethylsiloxane-PDMS) or similar medical grade silicone lubricant fluids. *MicroCare* Universal Carrier Fluid consists of a proprietary solvent blend that provides superior carrying capacity (dilution) of PDMS in weight concentrations up to 10% without fall-out. This capability exceeds the normal manufacturer recommended dilution range of 0.1 - 5%, and provides superior carrier performance and safety for high volume manufacturing applications.

Using *MicroCare* Universal Carrier Fluid with PDMS fluids provides excellent fluid dilution for thin film surface coating consistency regardless of surface geometry. The enhanced solvency of the *MicroCare* Universal Carrier Fluid provides excellent repeatability when applying the ideal amount of PDMS fluid by dipping, spraying or wiping applications.

As an added benefit, the unique properties of this carrier also make it well suited for cleaning and removing PDMS from articles made from most commonly used materials of construction.

Materials Compatibility

MicroCare Universal Carrier Fluid is compatible with all grades of stainless steel, brass, carbon steel and most nonferrous metals. It is also compatible with most plastics including nylon, HDPE, LDPE, PPE and PTFE. Elastomer compatibility is also good. *MicroCare* recommends that users confirm compatibility of the *MicroCare* Universal Carrier Fluid with solvent sensitive components prior to initiating production uses.

Physical & Chemical Properties

Odor	Slight Ether
Appearance	Clear, Liquid
Color	Colorless
Boiling Point	N/A
Solubility in Water	Slight
% Volatile by Weight	100
Vapor Density [air=1]	>1
Evaporation Rate [Ether=1]	<1
Vapor Pressure, mm Hg (psia)	Not Determined
Flash Point: Closed Cup [ASTM D 56]	Not Flammable

Packaging

Glass Bottle ¹ - 1 Pint / 0.47 L 1 Lb / 454 g	MCC-UCF016
Glass Bottle ¹ - 0.26 Gal / 1 L 2.5 Lb/1.13 kg	MCC-UCFGL
Glass Gallon ² - 1 Gal / 3.79 L 10 Lb / 4.54 kg	MCC-UCFGG
Steel Pail ¹ - 5 Gal / 18.93 L 50 Lb / 22.68 kg	MCC-UCFP
Steel Drum ¹ - 55 Gal / 208.2 L 500 Lb / 226.8 kg	MCC-UCF01D
Shelf Life	Unlimited
Recycle	

*Note: Products sold by weight, not volume.
One-gallon and smaller sample containers are available upon request.*

Application Methods

MicroCare Universal Carrier Fluid provides a safe, nonflammable, low toxicity drop-in alternative to flammable aliphatic and aromatic organic solvents commonly used for dilution and deposition of medical grade PDMS products. It also provides an excellent alternative to chlorinated solvent carriers that are increasingly subjected to environmental regulations.

Blending should be performed using a weight-ratio basis of carrier to silicone fluid. The solvency of the *MicroCare* Universal Carrier Fluid speeds the blending operation; silicone fluid quickly disperses into the carrier in ratios of up to 10%. Dipping is generally the preferred application method for high volume production requirements, but spraying, wiping or brushing are also suitable. Contact your local *MicroCare* sales engineer for assistance in application methods.

Because it is 100% volatile, *MicroCare* Universal Carrier Fluid will have no impact on post treatment procedures for product sterilization including autoclaving, dry heat, radiation and ethylene oxide procedures. It will also have no impact on quantitative test methods used to confirm surface treatment including FTIR, FAAS or comparative test methods.

For compliance with *Dow-Corning* product stewardship requirements, users will be required to purchase the appropriate grade of concentrated PDMS directly from *Dow-Corning* and subsequently perform the on-site mixing/dilution of the concentrated PDMS with the *MicroCare* Universal Carrier Fluid.

Environmental

MicroCare Universal Carrier Fluid has substantially lower Global Warming Potential (GWP) than CFCs, PFCs and HFCs.

All components of this product are listed on the US EPA TSCA inventory, and are also listed as approved by the US EPA Significant New Alternatives Program (SNAP). Contact *MicroCare* for details regarding EU REACH Registration and F-Gas compliance.



MicroCare, LLC

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
Email: EuroSales@MicroCare.com

MicroCare U.K. Ltd

Seven Hills Business Centre
South Street, Morley
Leeds, United Kingdom
LS27 8AT
Tel: +44 (0) 113 3609019
Email: mcceurope@microcare.com

MicroCare Asia Pte Ltd

102E, Pasir Panjang Road
Citilink, #05-06
Singapore 118529
Tel: +65 6271 0182
Email: TechSupport@MicroCare.sg