



High Performance Precision Cleaning Fluids

Discover Perfectly Clean



Precision Cleaning Fluids from MicroCare™

MicroCare offers a wide array of vapour degreasing fluids engineered to clean specific soils, meet compatibility requirements, achieve economic objectives and/or comply with environmental, health or safety standards. With more than 300 years of combined experience, nobody

knows more about the vapour degreasing process than the experts at MicroCare. This means customers get a cleaning process that is predictable, consistent and affordable. With MicroCare engineered solutions, you get a unique competitive edge over your competition.

<i>Applications & Contamination</i>	<i>Typical Parts</i>	<i>MicroCare Answers</i>
<p>Precision Cleaning Greases, Medium to Heavy Oils, Vanishing Oils, Fluorinated Oils, Silicones; Replacing HCFCs or nPB</p>	<p>Bearings, Stampings, Medical Device Components, Alloys, Optics, Composites</p>	<ul style="list-style-type: none"> • Tergo™ Metal Cleaning Fluid • Tergo Chlorine Free Cleaning Fluid • MicroCare HSFR • MicroCare HSDG
<p>Flux Residue Removal Lead Free No-Clean Fluxes RMAs High Temperature Reflow Fluxes</p>	<p>Electronics, PCBs/PWBs Hybrid Circuitry BGAs Client Policy to be Chlorine-Free</p>	<ul style="list-style-type: none"> • Tergo Chlorine Free Cleaning Fluid • Tergo High Performance Flux Remover • MicroCare HSFR
<p>Metal Cleaning Oil & Grease Removal</p>	<p>Drawn and Sintered Metals Metals with Heavy Grease or Wax-Based Soils Substrates with Potential Compatibility Issues</p>	<ul style="list-style-type: none"> • Tergo Metal Cleaning Fluid • Tergo Chlorine Free Cleaning Fluid
<p>Carrier and Deposition Fluids Medical Lubrication Deposition; Silicone Swelling Agents</p>	<p>Medical Device Components, Syringe Treatments, Tube Wall Thickness Calibration</p>	<ul style="list-style-type: none"> • MicroCare Universal Carrier Fluid • Swellex™ Silicone Swelling Fluid



Cost-Effective, Modern Vapour Degreasing

Vapour degreasing is a safe, economical, and environmentally-friendly cleaning process that meets and even exceeds today's most critical cleaning requirements—

Basic Operation

A vapour degreaser is a simple, closed-loop cleaning system using non-aqueous cleaning fluids. The entire cleaning cycle – washing, rinsing and drying – is fully contained inside the machine.

The vapour degreasing process has been used for nearly 100 years. It is widely used throughout the medical device, military, aerospace, electronics and telecommunication industries.

Operationally, everything starts by boiling the cleaning fluid. The vapours from the boiling liquid rise upward. They are trapped inside the degreaser with simple refrigeration (the "primary condensing coils"). The warm vapours rise up to those coils and condense back into liquid form. The clean, freshly distilled liquid flows to the water separator and then to the rinse sump. The rinse sump overflows into the boil sump and the process begins again.

Cleaning with a Vapour Degreaser

The cleaning process is equally simple. Parts are placed in a mesh basket. The basket is lowered either into the boil sump or suspended in the vapours over it. (Cleaning in the boil sump is preferred for heavily contaminated substrates.)

After a fixed time, the basket is immersed into the rinse sump that rinses them in clean, pure fluid. Ultrasonics may be used to improve rinsing.

Lastly, the parts are moved upwards into the vapour zone. The warm vapours condense on the cool parts for a final rinse. The parts then are removed from the machine. They are clean, dry and ready for subsequent processing.

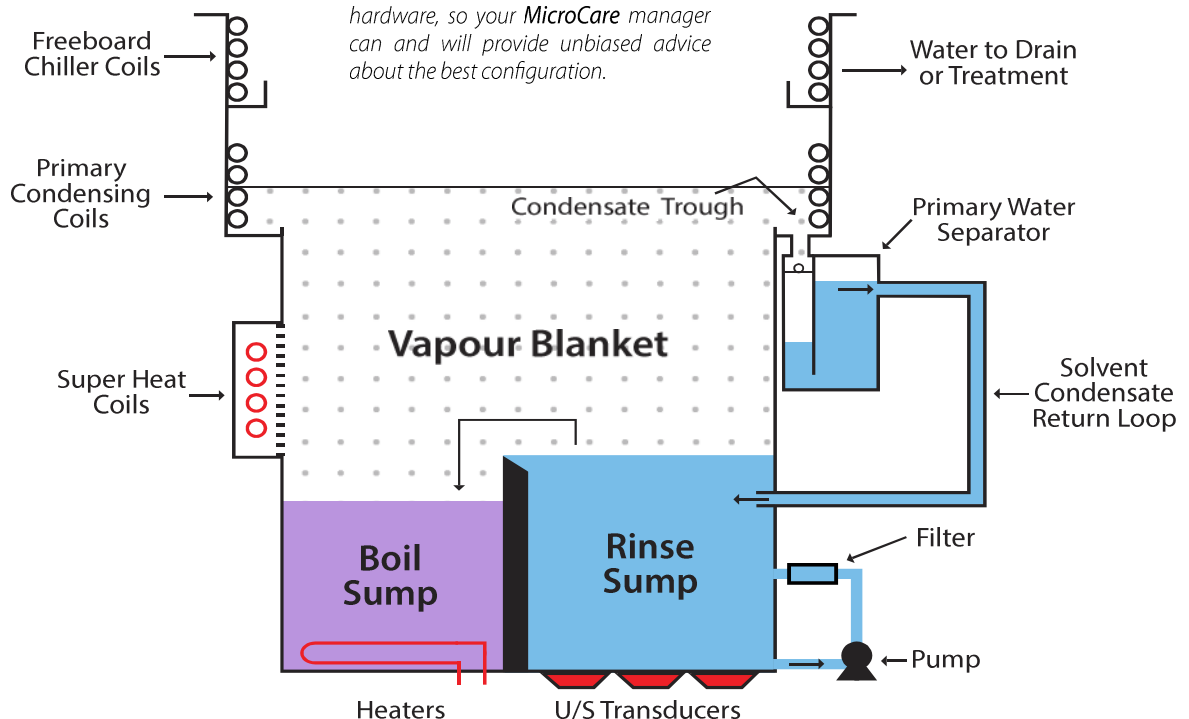
*This schematic shows the design of a basic vapour degreaser. There are many options and choices to optimize this simple design to better fit specific applications. **MicroCare** does not sell hardware, so your **MicroCare** manager can and will provide unbiased advice about the best configuration.*

Technical Support

As simple as vapour degreasing is, there are a few subtle parameters involved in the deployment of fast, reliable cleaning processes. With hundreds of years of experience and thousands of installations, *MicroCare* will step clients through the options simply and quickly. These include identifying the proper hardware, selecting the best cleaning fluid, defining the details of the cleaning process, training operators, and adapting the process as client requirements evolve.

MicroCare operates a fully-capable analytical lab to support customers and our field engineers. This group is second-to-none in process definition. Additionally, the broad array of cleaning choices easily accommodates diverse client requirements. The exclusive *MicroCare* Product Stewardship program ensures the cleaning process will be fast, easy, adaptable and very forgiving in virtually all manufacturing environments.

Nobody does this better than *MicroCare*.



Why Choose MicroCare?

Cleaning Fluid Characteristic	Benefits to Users
High Purity, No Residues	Cleans Parts Easily & Efficiently
Thermal & Chemical Stability	Long Fluid Life Saves Money
Excellent Materials Compatibility	Safe for Most Components
Low Surface Tension, Low Viscosity, High Density	Cleans Significantly Faster than Aqueous Process with Superior Cleaning Results
Hostile to Pyrogens	Easy Process Validation
Low Odour	No Complaints from Operators
Low Toxicity Ratings	Very Safe for Your People
Nonflammable	Very Safe for Your Facility
Fluid Is Automatically Recycled with Minimal Energy to Lower Environmental Impact	Reduces the Cost-per-Part-Cleaned



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About MicroCare

MicroCare Corp. is a global manufacturer of high-performance products used for cleaning, coating and lubrication. Since 1983 *MicroCare* has resolved tough cleaning situations in electronics, telecommunications, aerospace, military, transportation, medical devices and other industries. With a world-class portfolio of cleaners, processes and packaging, *MicroCare* delivers critical cleaning in the most cost-effective package. *MicroCare* will keep your people safe, your processes efficient and your costs low.

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Product stewardship is an elemental process at *MicroCare* which maximizes efficiencies and minimizes industrial risks. This industry-leading program includes safety training, managing environmental issues, dealing with regulatory concerns, and storage, handling and waste disposal programs. *MicroCare* supplements those services with safety training, checklists, equipment configuration guides and maintenance procedures. Nobody knows safe and efficient critical cleaning better than *MicroCare*.



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