

PRECISION BENCHTOP CLEANING PRODUCTS

MICRO CARE

The World's Cleaning Experts



- Solvents & Cleaners for Electronics** ■
- Money-Saving Dispensing Tools** ■
- Stencil Cleaning Products** ■
- Maintenance Cleaners** ■
- High-Performance Dry Lubricants** ■

SOLVENT GUIDE

**The Unique Micro Care Promise:
Our products will deliver faster, better, safer, cheaper
precision cleaning, or your money back, guaranteed.**

Micro Care
President
Chris Jones
(left) and Vice
President
Mike Jones



Circuit Board Cleaning	Optimal Choice	Other Great Choices
Rosin Fluxes/Pastes (R, RA, RMA, SA Fluxes/Pastes)	Flux Remover C^{1,4} MCC-FRC Medium-strength defluxer from DuPont. Great cleaning. Fast drying. Generally plastic-safe. Great environmentally. Works on no-cleans, too	SuprClean™^{1,4} MCC-SPR ProClean™^{1,2,3,4} MCC-PRO
"No Clean" Fluxes/Pastes, Mixed Types of Fluxes/Pastes	VeriClean™ Defluxer^{1,2,4} MCC-DC1 Great cleaner. Low aroma. Plastic-safe. Fast drying. 91% VOC exempt. Great environmentally	Axarel® 2200^{1,3,4} MCC-AXL Flux Remover C^{1,4} MCC-FRC IsoClean™^{1,3,4} MCC-BAC
Water-Based Fluxes/Pastes	Flux Remover C^{1,4} MCC-FRC A surprising capability from an HFC solvent. Great environmentally. Works on no-cleans, too	Axarel® 2200^{1,3,4} MCC-AXL ProClean™^{1,2,3,4} MCC-PRO
Mechanical Parts Light Oils, Grease, Lubricants	Heavy Duty Degreaser C^{1,4} MCC-HDC Medium-strength. Great cleaning. Fast drying; targeted on organics. No aroma. Nonflammable	ExPoxy™ Remover^{3,4} MCC-EPX Reflow™ Oven Cleaner^{2,4} MCC-ROC
Epoxies & Chip Bonders (Uncured); Coatings (Acrylics)	ExPoxy™ Remover^{3,4} MCC-EPX Most powerful hydrocarbon. Fabulous on uncured epoxies. Great on stencils and mis-printed PCBs	SuprClean™^{1,4} MCC-SPR VeriClean™^{1,4} MCC-DC1 BGA Stencil Cleaner^{2,4} MCC-BGA
Kapton® Tape, Pressure-Sensitive Labels, Glues	TidyPen® Label Remover MCC-P01 Powerful cleaner in pocket-sized pen. Fast. Non-staining. Huge time-saver. Long-lasting	Bioact® EC7M^{1,4} MCC-EC7M
Inks, Marking Pens	ScreenClean™ Ink Remover^{3,4} MCC-CDI Powerful, targeted cleaner. Great on UV-curable. Also good on uncured epoxies. Safe on screen emulsions	ProClean™^{1,3,4} MCC-PRO
Equipment Maintenance	Optimal Choice	Other Great Choices
General Surface Cleaning (Fingerprints, Light Oils, Grime)	Plastic & Glass Cleaner^{2,4} MCC-PMG Very good cleaning. Water-based. Great toxicity ratings. No residues, no detergents, no streaks	StatMat™ ESD Cleaner^{2,4} MCC-MAT IsoClean™^{1,3,4} MCC-BAC
Burned-on Flux Residues (Reflow Ovens, Wave Solder Machines)	Reflow Oven Cleaner™^{2,4} MCC-ROC Excellent cleaner. Great on wave solder systems, pick-and-place systems. No aroma. Nonflammable	QuickShot™ Oven Cleaner¹ MCC-QRS
Stencil Cleaning (Solder Paste)	BGA Stencil Cleaner^{2,4} MCC-BGA Medium drying. Water-based. More versatile cleaning than Reflow Oven Cleaner. Nonflammable	ExPoxy™ Remover^{3,4} MCC-EPX Axarel® 2200^{1,4} MCC-AXL
Contact Cleaning	Contact Cleaner C^{1,4} MCC-CCC HFC-based. Nonflammable. Safe on plastics. Almost instant drying. Affordable	Precision Cleaner II^{1,4} MCC-PC2
ESD Table Mats	Stat Mat™ ESD Cleaner^{2,4} MCC-MAT Water-based. Nonflammable. Renews ESD surfaces to protect sensitive components. Instant payback with reduced defect rates	
Bulk Cleaning Systems	Optimal Choice	Other Great Choices
Heated Vapor Defluxing/Degreasing Systems	Vertrel® CMS^{1,4} or Vertrel® CCA^{1,4} MCC-CMS, MCC-CCA Medium-strength HFCs. Great cleaning, fast drying; great on inorganics. Nonflammable	Vertrel® SMT⁴ MCC-SMT
Unheated Ultrasonic Systems, and Stencil Cleaning Systems and Emersion Systems	BGA Stencil Cleaner^{2,4} MCC-BGA Medium drying; water-based, more versatile than Oven Cleaner. Nonflammable	RossTech™ 106FE⁴ MCC-106FE

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PACKAGING NOTES: Each solvent is available in: (1) aerosol sprays (2) refillable pump sprays (3) presaturated wipes (4) bulk packages. Not all products available in all countries. Contact your distributor or Micro Care for guidance.

DISCLAIMER: This is a general guide to cleaning applications and is not meant to replace individualized discussions. Micro Care publishes this information from sources believed to be accurate. Micro Care does not guarantee the accuracy of the data and assumes no liability in connection with using it. Micro Care's liability is limited to the replacement of product. Specifications may change without notice.

THE TIME-SAVING TRIGGER GRIP

Upgrade Your Processes

In the electronics world, everything is always changing. But at many facilities, the only thing that doesn't change is benchtop cleaning!

The Trigger Grip™ system instantly upgrades your cleaning program. It standardizes cleaning into a convenient four-step process: wet, scrub, rinse, and dry. It gives each technician better control of the whole cleaning process. The Trigger Grip will help them clean better, faster and more safely, with less wasted solvent and less effort.

The payback is fast. Companies using old-style high-pressure aerosols find the Trigger Grip slashes their benchtop cleaning costs by 50% or more. Here's how Micro Care can start saving you money today:

The Solvent Miser™

The most popular Trigger Grip. Slashes solvent consumption, minimizes worker exposure to solvent fumes; minimizes user fatigue. Virtually indestructible, including hose and aerosol connectors. Produced from ESD-dissipative materials; complies with MIL-STD-2000 requirements. Equipped with the standard brush. The **Slo-Flo Solvent Miser™ Trigger Grip** is identical but equipped with the money-saving slo-flo brush. Ideal for use with slow-drying solvents. Patented.

Standard: #MCC-ESD
Slo-Flo: #MCC-ESD2



The old dip-and-brush method is cheap to buy but expensive to use because it makes rinsing impossible. Old-fashioned aerosols waste solvent, damage the environment and expose workers to potentially hazardous fumes.



The Original Trigger Grip™

Your least expensive choice. The same functionality as the SolventMiser, but without quite the same durability and with slightly less ESD protection. Heat shield protects solvent dispensing hose. The **Slo-Flo Standard Trigger Grip** is identical but equipped with the slo-flo brush. An excellent choice for use with affordable, slow-drying solvents. Patented.

Standard: #MCC-STB
Slo-Flo: #MCC-STB2

Brushes

Both types of Trigger Grips can be fitted fit replacement brushes. This allows the tech to customize the Trigger Grip to fit the application, saving time and solvent.

Bench Mounting Kit

A simple idea that works great. A low-cost, two-piece system that holds the Trigger Grip and the can of solvent vertically at the workbench. ESD-safe. Extremely durable. Extends Trigger Grip life. Ensures that aerosol cans will empty completely.

#MCC-BK

StatZap™ ESD Eliminator

For more information — Product Spec PS-73

Simply a better idea! Use this durable stainless steel nozzle on canned air, freeze sprays and high pressure aerosols. It reduces ESD voltages generated by plastic spray tubes to a harmless 50 volts or less. The swagged corona tip sucks away harmful ESD voltages. Unique plastic sheathing prevents inadvertent contact with energized circuits. Patented.

#MCC-ZAP

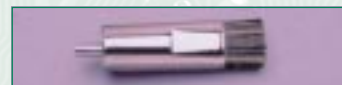
Training Video

Eight minutes of safety training. Learn how to connect, disconnect and clean more effectively using the Trigger Grip.

#MCC-VT1



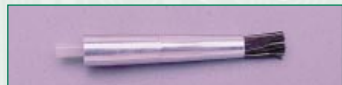
BRUSHES



Our best-selling brush #MCC-RBNB



Long-nose for cleaning pins Slo-flo version #MCC-LNB #MCC-LNB2



Standard surface-mount brush Slo-flo version #MCC-SMB #MCC-SMB2



Medium size, .020" O.D. #MCC-SR20



▲ The two-piece Bench Mounting Kit keeps the can upright and the work area neat.

HIGH-PERFORMANCE DEFLUXERS



Flux Remover C

This new cleaner is an excellent defluxer – especially on hard-to-clean “no-clean” fluxes and pastes. With an ultra-low surface tension, it is the best choice for cleaning hybrids and getting under tight-fitting BGA chips. It also is great on through-hole and SMT boards, cables and connectors.

Noncorrosive and ultra-pure, static-safe Flux Remover C is safe on components and plastics. It is nonflammable, quick-drying and has only a very slight aroma. Residue-free, rinsing is never required. Ozone-safe. Low global warming factor. Reduced VOC content. Safe in ultrasonic and vapor degreasers.

- Truly excellent defluxing
- Targeted on ionic contamination
- Nonflammable
- Very slight aroma
- Great on “no-cleans”
- Fast drying

For more information — Product Spec PS-91



Flux Remover C

10.5 oz./300 g Aerosol	MCC-FRC
10.5 oz./300 g Pump Spray	MCC-FRCNA
10 lbs./4.54 kg Minipail	MCC-FRCG
50 lbs./22.68 kg Pail	MCC-FRCP
500 lbs./226.80 kg Drum	MCC-FRCD

VeriClean™ Solvent

10 oz./284 g Aerosol	MCC-DC1
6 lbs./2.72 kg Minicube	MCC-DC1G
32 lbs./14.50 kg Cubitainer	MCC-DC1P
345 lbs./156.48 kg Drum	MCC-DC1D

SuprClean™

12 oz./340 g Aerosol	MCC-SPR
10 lbs./4.54 kg Minipail	MCC-SPRG
50 lbs./22.68 kg Pail	MCC-SPRP
500 lbs./226.80 Kg Drum	MCC-SPRD

ProClean™ Flux Remover

12 oz./340 g Aerosol	MCC-PRO
1.87 lbs./0.84 kg Wipes	MCC-PROW
6 lbs./2.72 kg Minicube	MCC-PROG
32 lbs./14.51 kg Cubitainer	MCC-PROP
360 lbs./163.27 kg Drum	MCC-PROD

MultiClean™ OA Flux Remover

1.87 lbs./0.84 kg Wipes	MCC-MLCW
6 lbs./2.72 kg Minicube	MCC-MLCG
32 lbs./14.51 kg Cubitainer	MCC-MLCP

SuprClean™ Defluxer

Featuring innovative new solvents from DuPont, this unique cleaner is optimized for ozone-safe benchtop-level defluxing and degreasing. An excellent choice on all rosin fluxes. It dries quickly and is nonflammable. It has the best toxicity ratings of any solvent in its class. It compares to 1,1,1-TCA in cleaning strength but is completely ozone-safe. Test on plastics. Static-safe. Low odor.

- Featuring Vertrel® HFCs
- Nonflammable
- Fast drying
- Good toxicity ratings
- Highly effective on rosin fluxes
- Exclusively from Micro Care

For more information — Product Spec PS-83



ProClean™

For years our best-selling product, this cleaner delivers surprisingly strong cleaning despite its humble ingredients. It is the strongest of the alcohol-based choices. It is safer than rubbing alcohol and an excellent choice on rosin fluxes, OA fluxes and “no-cleans.”

Pleasant, mildly sweet aroma with excellent toxicity ratings. Medium drying. Static-safe. Mil-spec approved. Biodegradable. Plastic-safe. Ozone-safe. Flammable.

- Great on solder pastes, fluxes and fresh chip-bonder
- Water-free to 4 decimal places
- Economical; slow drying
- Suitable for military work
- Extremely cost-effective

For more information — Product Spec PS-45



MultiClean™

Mild, safe and economical, this blend of alcohol and ultra-pure water is surprisingly effective. Modest aroma, medium drying. Very good toxicity ratings. Slow-drying. Static-safe. Mil-spec approved. Biodegradable. Plastic-safe. Ozone-safe. Flammable.

Not available in aerosol; only in presaturated wipes and bulk (unpressurized) packaging.

For more information — Product Spec PS-42



POWERFUL DEGREASERS

Heavy Duty Degreaser C

This is an environmentally progressive cleaner which is affordable, powerful and nonflammable. It was formulated by Dupont for removing organic contamination, such as oils, light grease and lubricants, from all types of metal, ceramic and plastic.

Noncorrosive and ultra-pure, it is an excellent choice for semiconductors, disk drives, switches and relays, motors and coils, gyroscopes, medical devices and any application in which reliability and performance are crucial.

The cleaner is generally nontoxic, nonflammable, dries almost instantly and has a very low surface tension. The product is completely ozone-safe, low VOC and with a low global warming impact. The blend can be used in vapor degreasers.

- Fast-drying, nonflammable
- Great on organics
- Unexpectedly affordable
- Safe in vapor degreasers

For more information — Product Spec PS-92



Axarel® 2200

For more than a decade, Axarel 2200 has been a trusted cleaner around the globe. This active hydrocarbon solvent is formulated for defluxing and degreasing. It works great on all fluxes, pastes, epoxies, grease and oil. Slight musty aroma. No rinsing. IPC Phase II approved. Combustible. Biodegradable. Ozone-safe. Generally plastic-safe.

- Great on all fluxes and pastes
- Medium drying
- Modest aroma

For more information — Product Spec PS-55



ExPoxy™ Remover

The most powerful hydrocarbon cleaner. Proven by Micro Care to be the undisputed champ at removing uncured chip bonder. It removes it from boards, dispensing gear, work benches and even the floor. It simply is your most effective choice on the toughest cleaning problems where a combustible solvent is acceptable.

Economical. Pleasant, mild aroma. Excellent toxicity ratings. Medium drying. Static-safe. Biodegradable. Ozone-safe. Test on plastics. Combustible.

- Powerful surface cleaning
- Economical slow drying

For more information — Product Spec PS-76



Bioact® EC7M

This muscular cleaner instantly attacks all fluxes, even water-based ones. Produced only from Florida oranges. Ozone-safe. Slow drying. No rinsing. Biodegradable. Test on plastics. Good ventilation is mandatory.

- Naturally-occurring solvent
- Characteristic citrus aroma

For more information — Product Spec PS-18



Heavy Duty Degreaser C

10.5 oz./300 g Aerosol	MCC-HDC
10 lbs./4.54 kg Minipail	MCC-HDCG
50 lbs./22.68 kg Pail	MCC-HDCP
500 lbs./226.80 kg Drum	MCC-HDCD

ExPoxy™ Remover

1.87 lbs./0.84 kg Wipes	MCC-EPXW
1.87 lbs./0.84 kg Wipes	MCC-EPXWR
6 lbs./2.72 kg Minicube	MCC-EPXG
30 lbs./13.61 kg Cubitainer	MCC-EPXP
392 lbs./177.81 kg Drum	MCC-EPXD

Axarel® 2200

10 oz./284 g Aerosol	MCC-AXL
1 lb./0.45 kg Presat. Wipes	MCC-AXLWR
1 lb./0.45 kg Presat. Refills	MCC-AXLWR
6 lbs./2.72 kg Minicube	MCC-AXLG
35 lbs./15.86 kg Cubitainer	MCC-AXLP
365 lbs./165.90 kg Drum	MCC-AXLD

Bioact® EC7M™

10 oz./284 g Aerosol	MCC-EC7M
6 lbs./2.70 kg Minipail	MCC-EC7MG
35 lbs./15.80 kg Pail	MCC-EC7MP
399 lbs./176.90 kg Drum	MCC-EC7MD

Techs like these rugged cardboard "cubitainers" because they eliminate lifting heavy pails of solvent, avoiding spills. ▶



MAINTENANCE PRODUCTS



BGA Stencil Cleaner

12 oz./340 g Pump Spray (Refillable)	MCC-BGA
7 lbs./3.18 kg Minicube	MCC-BGAG
32 lbs./14.51 kg Cubitainer	MCC-BGAP
400 lbs./181.44 kg Drum	MCC-BGAD

High-Performance Reflow Oven Cleaner

12 oz./340 g Pump Spray (Refillable)	MCC-ROC
7 lbs./3.18 kg Minicube	MCC-ROCG
32 lbs./14.51 kg Cubitainer	MCC-ROCP
364 lbs./165.08 kg Drum	MCC-ROCD

Plastic, Metal & Glass Cleaner

12 oz./380 g Pump Spray (Refillable)	MCC-PMG
6 lbs./2.72 kg Minicube	MCC-PMGG
35 lbs./15.88 kg Cubitainer	MCC-PMGP
450 lbs./204.08 kg Drum	MCC-PMGD

StatMat™ ESD Cleaner

12 oz./340 g Pump Spray (Refillable)	MCC-MAT
7 lbs./3.18 kg Minicube	MCC-MATG
32 lbs./14.52 kg Cubitainer	MCC-MATP
400 lbs./181.44 kg Drum	MCC-MATD

Note: These maintenance products are packaged in money-saving refillable pump sprays. Packaged ten to a box, these products are packaged in metal, ESD-safe cans. Included in each box are 100 lint-free stencil wipes (#MCC-W11). These products are non-regulated, non-hazardous for shipping purposes, which means technicians can safely carry them on aircraft.

BGA Stencil Cleaner

The BGA Stencil Cleaner is a versatile formulation which blends nonflammable water-based ingredients with aggressive long-chain alcohols. The result is a powerful cleaner which removes all types of solder paste, uncured chip bonders and inks. It is safe for stencils, webbing, frames and misprinted boards. This highly active cleaner minimizes the risk of damage from scrubbing with less powerful cleaners. And, yes, it can be used on standard SMT stencils as well.

Safe on all metals, synthetics, plastics and elastomers, the BGA Stencil Cleaner leaves no residues and has a very modest aroma. It is noncorrosive and generally nontoxic. Completely ozone-safe, with a low VOC content and no global warming potential.

- Speedy stencil cleaning
- Economical, slow drying
- New, NAFTA-compliant labels
- Safe for use with ultrasonics
- Refillable pump spray

For more information — Product Spec PS-79



Plastic, Metal and Glass Cleaner

This is industry's strongest general-purpose surface cleaner. It is formulated for cleaning benchtops, cabinets, housings, keyboards, keypads, switches, test equipment, conveyors, hand tools and all the other equipment found in the factory environment. It easily wipes away light grime, oils, fingerprints, pencil marks, pen inks and even coffee stains.

This cleaner contains no detergents which leave sticky, soapy residues. This cleaner is completely safe on all metals, paints, ceramics, glass, benchtops and plastics. It leaves no residues and is noncorrosive. No rinsing required. Nonflammable. Good toxicity ratings. Plastic-safe. Static-safe.

- Water-based, nonflammable
- Refillable pump sprayer
- Not for use on static dissipative mats

For more information — Product Spec PS-79



High-Performance Reflow Oven Cleaner

The High-Performance Reflow Oven Cleaner instantly melts away burned-on flux residues from wave solder machines and reflow ovens. Strong, nonflammable and with almost no aroma, the Oven Cleaner works twice as fast as isopropanol.

The cleaner works best when wiping and scrubbing warm soldering systems (>40°C/100°F). It also can be used in dip tanks and ultrasonic cleaners without foaming.

This product cleans all types of flux residues. It is safe on pallets, baffles, heating elements, clamps, chains, drive gears and housings. The cleaner dries quickly, leaves no residues and is noncorrosive. It is completely ozone-safe, with a low VOC content, low global warming and is generally nontoxic.

- Fast, easy oven cleaning
- Nonflammable, water-based
- New, NAFTA-compliant labels
- Refillable pump spray

For more information — Product Spec PS-79



StatMat™ ESD Cleaner

This cleaner enhances and extends a facility's ESD program. As a general rule, every benchtop mat and floor mat should be cleaned once each shift. Micro Care has found dirty tools and mats on workbenches harboring up to 30,000 volts. After a thorough cleaning with StatMat, in less than 60 seconds, the voltage dropped to safe levels and, in some tests, to zero. This means this product quickly pays for itself in fewer defects and lower warranty costs.

The cleaner is safe on all metals, plastics and elastomers. Unlike competing products, this cleaner has a neutral pH which protects the mats. Completely ozone-safe. Low in VOCs. Low global warming potential. Good toxicity ratings. Nonflammable. Plastic-safe.

- Water-based, nonflammable
- Refillable pump sprayer
- To protect mats, Neutral PH
- Mild, strawberry-like aroma

For more information — Product Spec PS-79



CONTACT CLEANERS AND MORE

Contact Cleaner C

This is the highest-performance precision contact cleaner formulated by DuPont. It is nonflammable, nonconductive, plastic-safe and dries instantly, with almost no aroma. It can be used safely on circuit boards, cable harnesses, rinsing grit from electromechanical relays, dust from keyboards and light oils from solvent-trapping motor windings.

This is the most affordable cleaner in its class. Completely ozone-safe and 100% VOC-exempt. Safe on plastics, rubber and elastomers.

- Plastic-safe
- Completely ozone-safe
- Non-VOC
- Ultra-fast drying
- Nonflammable

For more information — Product Spec PS-48



Micro•Freeze™ Circuit Chillers

Chills to lower than -45°C in seconds. Used to locate intermittent faults in delicate components. Ultra-pure, ozone safe, nonflammable.

For more information — Product Spec PS-50



Anti-Stat Micro•Freeze™

Ozone-safe, ESD-safe freeze-spray. Meets mil-specs. Chills to -45°C in seconds. Non-toxic, nonflammable.

For more information — Product Spec PS-50



DRY LUBRICANTS

Certain Micro Care solvents also serve as carrier agents for coatings and lubricants. The most common coatings are silicones (in concentrations up to 15% or so) and PTFE powdered coatings (up to 9%). Most users dilute the concentrates to 1% by weight.

The nonflammable carrier fluid deposits the coating in a dipping process. Irregular shapes can be coated as easily as a flat platter. The primary benefits are enhanced throughput, improved quality and lower total costs.

These applications usually require custom blends from Micro Care. However, the VDX aerosol using PTFE lubricants is very popular.

IsoClean™ Video- and Tape-Head Cleaner

Your "Basic Alternative Cleaner." Mild cleaning with ultra-pure, water free, isopropanol. A great head cleaner. Static-safe. Mil-spec approved and mild defluxer, well-suited to "no clean" fluxes and pastes.

For more information — Product Spec PS-48



Micro•Blast™ and Big•Blast™ "Canned Air"

Ozone-safe dry circuit cleaner ("canned air"). High pressure spray. Convenient trigger sprayer on each can. Nontoxic, nonflammable. Available in two configurations: the standard valve for maximum "blasting" power, and the money-saving "Z" valve which extends can life and is StatZap™ compatible. Specify by part number.

For more information — Product Spec PS-50



Related Products

StatZap™ ESD Eliminator

A durable, stainless steel dispensing nozzle for all high pressure aerosols. It eliminates ESD damage from the friction of solvent racing down plastic spray tubes, reducing ESD voltages to a harmless 50 volts or less. Shown on a can of Micro•Blast "canned air" on the upper left-hand corner of this page.

For more information — Product Spec PS-73

VDX Aerosol

A nonmigrating "pinpoint" lubricant for metal, plastic, ceramic, glass and wood. Plastic-safe, nonflammable, ozone-safe HFC carrier using 1.5% solids. No drips, runs or clumping! Much more effective than traditional (wet) lubricants. Great mold release.

For more information — Product Spec PS-51



Contact Cleaner C

10.5 oz./300 g Aerosol	MCC-CCC
10 lbs./4.54 kg Minipail	MCC-CCCG
50 lbs./22.68 kg Pail	MCC-CCCP
500 lbs./226.80 kg Drum	MCC-CCCD

Micro•Freeze™ Circuit Chiller

10 oz./284 g Aerosol	MCC-FRZ
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Anti-Stat Micro•Freeze™ Circuit Chiller

10 oz./284 g Aerosol	MCC-FRZA
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Micro•Blast™ "Canned Air"

10 oz./284 g Aerosol	MCC-DST
10 oz./284 g Aerosol, StatZap™ compatible	MCC-DSTZ

Big•Blast™ "Canned Air"

14 oz./392 g Aerosol	MCC-AIR
14 oz./392 g Aerosol, StatZap™ compatible	MCC-AIRZ

StatZap™ ESD Eliminator

Each	MCC-ZAP
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IsoClean® Head Cleaner

12 oz. /340 g Aerosol	MCC-BAC
6 lbs./2.72 kg Minicube	MCC-BACG
32 lbs./14.50 kg Cubitainer	MCC-BACP
355 lbs./161.00 kg Drum	MCC-BACD

VDX Aerosol

12 oz./340 g aerosol	MCC-VDX
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Legend

- USER-FRIENDLY: FAST DRYING AND/OR LOW AROMA
- PLASTIC-SAFE
- ESD-SAFE
- NON-FLAMMABLE
- OZONE-SAFE
- MIL-SPEC APPROVED
- LOW VOC OR VOC-EXEMPT

PRESATURATED WIPES

For more information on all Micro Care presaturated tub wipes, see Product Spec PS-77



Specifications:

All Micro Care presaturated tubs contain 100 wipes, 8 by 5 inches, loaded with about one pound (454 grams) of solvent. Priced per-tub, packaged twelve (12) tubs per case.

The vacuum-packed wipe refills are packaged 12 bags/box. One year shelf life.








For details on the specific solvents, see the MSDS sheets and the product specifications.

Stencil Wipes	MCC-PROW
Stencil Wipe Refills	MCC-PROWR
Economy Wipes	MCC-MLCW
Economy Refills	MCC-MLCWR
Heavy Duty Stencil Wipes	MCC-AXLW
Heavy Duty Refills	MCC-AXLWR
ExPoxy™ Wipes	MCC-EPXW
ExPoxy™ Refills	MCC-EPXWR
ScreenClean™ Wipes	MCC-CDIW
ScreenClean™ Refills	MCC-CDIWR

TidyPen®

14 ml Pen, each, packaged in a box of ten pens	MCC-P01
14 ml pen, set of 3 pens in money-saving, ready-to-mail package	L80881
Extra Chisel-Point Nibs	MCC-P40C
Extra Pen-Point Nibs	MCC-P40P

Legend

-  **USER-FRIENDLY: FAST DRYING AND/OR LOW AROMA**
-  **PLASTIC-SAFE**
-  **ESD-SAFE**
-  **NON-FLAMMABLE**
-  **OZONE-SAFE**
-  **MIL-SPEC APPROVED**
-  **LOW VOC OR VOC-EXEMPT**

Stencil Wipes

Featuring ProClean™ Solvent

Our best-selling tub wipe: powerful, versatile and economical. Ideal for cleaning most SMT stencils. Versatile, low aroma, good tack time.



Economy Wipes

Featuring MultiClean™ Solvent

This low-cost stencil wipe easily lifts away all types of solder paste. However, the product is not an aggressive cleaner and so is limited to the less demanding applications. Modest aroma. Medium-drying. Very good toxicity ratings. Static-safe. Flammable. Mil-spec approved. Biodegradable. Plastic-safe.



Heavy Duty Wipes

Featuring Axare® 2200 Solvent

A very strong, general purpose hydrocarbon cleaner. It easily wipes away hardened solder pastes, many epoxies and some inks. An excellent choice for the more demanding stencils and misprinted boards. Modest musty aroma. Medium-drying. Good toxicity ratings. Static-safe. Flammable. Biodegradable. Plastic-safe.



ExPoxy™ Wipes

When you put it on it's an epoxy, but once you hit it with this cleaner it's an "ExPoxy." This wipe is your best choice for removing uncured chip board from mis-printed boards, as well as tidying up spills and drips on machinery. Based on a proprietary and highly activated hydrocarbon chemistry, ExPoxy gives technicians the widest possible process "window" for working with semi-cured chip-bonders. This powerful cleaner is also a great choice for solder pastes and many inks.

Mild, musty aroma. Combustible. Static-safe. Plastic-safe. Ozone-safe. Slow drying for maximum economy.



ScreenClean™ Wipes

A special hydrocarbon blend prepared for the hybrid circuit industry which often screens thick-film pastes. A powerful ink remover, specifically targeted to UV-curable inks. Modest aroma, dries slowly.

A slightly fruity, heavier aroma. Combustible. Static-safe. Plastic-safe. Ozone-safe. Slow drying for maximum economy.



TIDYPEN®

The Original Pocket-Sized Cleaning Pen

What a great idea! Fast, convenient cleaning in your pocket. Take it anywhere! Great for removing marking tags, paper labels, stickers, EPROM labels and bar codes. Kapton® tape residues melt away easily and safely. Very cost-effective — a "must have" time-saver. Static-safe. Ozone-safe. Biodegradable.

- *Recyclable, ESD-safe*
- *Dissolves anything sticky*
- *Biodegradable citrus solvent*
- *A naturally-occurring product*

For more information — Product Spec PS-40



▲ Nothing whisks away sticky residues like the TidyPen — put one in your pocket today!

SOLVENTS FOR VAPOR CLEANERS

Vapor degreasing is a powerful process for critical cleaning applications. Compared to aqueous cleaners, vapor degreasers are less expensive to buy and to use. They tend to be smaller, simpler, faster, and easier to maintain. They use less energy, generate less waste, and are gentle on the environment.

Micro Care offers the Vertrel® family of specialty solvents for vapor degreasing applications. Vertrel® cleaners are versatile and can remove many types of contamination. The products are easy to re-use and recycle, which protects the environment and keeps costs down. They have almost no aroma, good toxicity ratings, and are nonflammable, so cleaning is easy, fast, safe and affordable



DEFLUXERS

Vertrel® CMS

Industry's first choice for vapor defluxing, especially on dense, tight, hot PCBs. This product can clean BGA components and hybrid circuits. Generally plastic-safe, it is extremely versatile -- it likes R, RA, RMA, synthetic and even some "no clean" fluxes and pastes.

Vertrel® SMT

Aggressive. More expensive than Vertrel® CMS, this would be the best choice in a low-emission vacuum system. Test on plastics.

Vertrel® XMS Plus

Most aggressive. Tailored for the toughest organic contamination. It can carry the highest levels of flux loading. Test on plastics.

PARTICULATE REMOVAL

Vertrel® XP

Solder balls, metal finings, dust and grit need Vertrel® XP because it breaks any static bonds and actually floats the contamination away. A great choice for optics and other applications where surfactants are not acceptable. Also an excellent drying agent in applications where there is little contamination and not a lot of water. No rinsing.

DEGREASING

Vertrel® CCA

Nothing beats the cost-effective cleaning of Vertrel® CCA. Tailored to remove organic contamination like oils and grease. Safe on metals, glass, plastics, ceramics and more.

Vertrel® MCA Plus

Another great choice, more expensive but more powerful. Often selected as the best choice for cleaning oxygen systems, vacuum systems and high-performance degreasing. Test on plastics.

Micro Care Aircraft Flush 2

A near-azeotrope from Micro Care, this cleaner is optimized for the removal of hydraulic fluids from aircraft, such as "Skydrol" and fluids based on MIL-5606 fluids. Safe on urethane paints.

Vertrel® CHD

The most powerful degreaser. It removes all sorts of greases, cutting oils and lubricating oils. It also can remove silicone residues. Test on plastics. Special Note: Vertrel® CHD is not suitable for use in vapor degreasers.

DRYING

Vertrel® XDA

Use Vertrel® XDA to remove entrapped water after an aqueous wash. Optimized for applications in which large quantities of water must be removed. Rinsing required.

SILICONE SWELLING

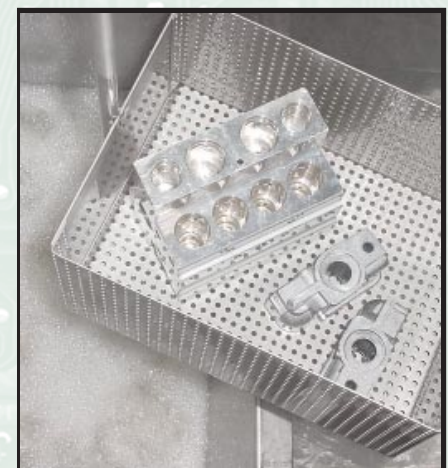
Vertrel® XSi

An excellent choice for those applications where small silicone tubes or parts need to be gently but temporarily enlarged. Often found in medical device manufacturing, Vertrel® XSi is affordable, fast-drying, quick acting and generally non-toxic. Special Note: Vertrel® XSi is a flammable mixture not suited for heated cleaning systems.



▲ Vapor degreasing is a mature, well-proven technology well-suited for the toughest cleaning applications. For great cleaning at the lowest cost, a vapor degreaser with Vertrel® solvents are an excellent choice.

Vertrel® XF 10 lbs./4.54 kg	MCC-XFG
Vertrel® CMS 10 lbs./4.54 kg	MCC-CMSG
Vertrel® CCA 10 lbs./4.54 kg	MCC-CCAG
Vertrel® CF 10 lbs./4.54 kg	MCC-CFG
Vertrel® XP 10 lbs./4.54 kg	MCC-XPXG
Vertrel® MCA+ 10 lbs./4.54 kg	MCC-MCAXG
Vertrel® SMT 10 lbs./4.54 kg	MCC-SMTG
Vertrel® XMS+ 10 lbs./4.54 kg	MCC-XMSG
Vertrel® XDA 10 lbs./4.54 kg	MCC-XDAG
Vertrel® XSi 10 lbs./4.54 kg	MCC-XSIG
Aircraft Flush II 10 lbs./4.54 kg	MCC-ACF2



For additional details on solvents for vapor degreasers, check out www.VertrelSolvents.com

STENCIL ROLLS

For more information on all Micro Care stencil cleaning rolls, see Product Spec PS-64

Specifications:

Sold by the roll. All rolls are packaged ten rolls per case. Each roll individually wrapped. Unlimited shelf life. Guaranteed to fit!

Micro Care manufactures a wide variety of custom rolls. If you have a different machine or an unusual requirement, call us about our custom services!



▲ The folks who make stencil printers design wiping rolls for their convenience, not yours, so there are hundreds of different sizes and shapes. Micro Care has them all, and our quality is guaranteed.

Part #	Stencil Printer System	Core Length Inch/mm	Core Inner Diameter Inch/mm	Core Roll Outer Diameter Inch/mm	Roll Width Inch/mm	Roll Length Feet/Meter
104E	DEK	21.25/540	0.787/20	2.5/60	21.25/540	36/11
105C	DEK	20.87/530	0.79/20	2.25/50	20.37/510	30/9.1
105E	DEK	20.87/530	0.79/20	2.25/50	20.37/510	30/9.1
105X	DEK	20.87/530	0.79/20	2.25/50	20.37/510	50/15.2
106E	DEK	17.91/450	0.29/70	2.36/60	17.41/440	36/11
J119E	DEK	20.87/530	0.787/20	2.25/50	15.75/400	30/9.1
J171E	Ekra	13.755/350	0.472/12	1.965/50	13.755/350	12/3.7
J174E	Ekra	19.68/500	0.51/13	1.77/40	19.68/500	20/6.1
J177E	Ekra	16.506/420	0.472/12	1.965/50	16.506/420	12/3.7
J178E	Ekra	17.685/450	0.472/12	1.965/50	17.685/450	12/3.7
J148EA	Fuji	19.69/500	1/25	2.36/60	19.69/500	30/9.1
J189E	Fuji	15.748/400	1/25	2.36/60	15.748/400	30/9.1
101TEA	MPM	18/450	0.75/19	2.5/60	17.5/440	39/11.9
101TX	MPM	18/450	0.75/19	2.5/60	17.5/440	50/15.2
102E	MPM	18/450	1/25	2.5/60	17.5/440	33/10.1
103E	MPM	25.25/640	0.75/19	2.5/60	24.75/620	39/11.9
J122E	MPM	9/220	0.75/19	2.5/60	8/200	39/11.9
J130E	MPM	24/610	0.75/19	2.75/70	24/610	39/11.9
J138E	MPM	18/450	0.75/19	2.5/60	9/220	39/11.9
J206E	MPM	20.67/520	1.5/38	2.5/60	20.276/510	39/11.9
107E	Panasonic	21.25/540	1.5/38	3/70	21.25/540	39/11.9
108E	Panasonic	14.18/360	1.5/38	3/70	14.18/360	39/11.9
J109E	Quad	16.15/410	1.5/38	2.5/60	16.15/410	22/6.7
J139E	Quad	16.15/410	1.5/38	2.5/60	16.15/410	22/6.7
J206E	Quad	20.67/520	1.5/38	2.5/60	20.273/510	39/11.9/

Stencil Wiping Systems

For stencil cleaning rolls, Micro Care only uses first-quality hydroentangled "non-woven" spunlace material from DuPont. This paper is a blend of ultra-pure cellulose paper and an ultra-clean rayon/polyester fabric. The synthetic fabric provides great strength while the cellulose provides great absorption. When you use Micro Care rolls, you can be assured that only DuPont quality will be cleaning your stencils. Here's what that quality brings:

1 – Lower Fiber & Particle Counts

Micro Care rolls will contain fewer broken fibers, resulting in less visible contamination 100µ or larger. The binders used in cheaper rolls tend to let the paper abrade, yielding higher particle counts.

2 – Less Ionic Contamination

Sontara does not release any sodium and chloride ionic contamination which could be redeposited on the stencil and boards. Fabrics not manufactured by DuPont may have higher extractables, often up to 1% of the weight of the sheet.

3 – Reduced Non-Volatile Residues

Binders often leave white residues which are highly visible, impair the effectiveness of conformal coatings and increase the rejection rates during QC inspection.

4 – Greater Durability

Sontara papers are completely unaffected by electronics-grade solvents. Sontara wipes exhibit a tensile strength of up to 400N/90 lbs., depending upon the fabric, and will retain 75% of this strength even when wet.

6 – Consistent Cleaning

Since there are no nonvolatile binders, chemicals, adhesives, or surface finishes added to the paper during the manufacturing process, the fabric is more consistent from lot to lot, and the wiping process will be more reliable.

7 – Greater Absorption

Binders fill the gaps between the fibers in the fabric, clogging spaces that would otherwise absorb solvents, solder paste and epoxies. Sontara fabrics lead the industry in purity, puffiness and softness.

FLAT WIPES AND SWABS

For more information – See Brochure BR-89

FLAT WIPES

Micro Care Part #	Wipe Size Inch cm	Material	Texture	Particulate (0.5µ/m2)	Absorbency (mL/m2)	Packed in Clean Room	ESD Pack'g	Clean Room Pack'd	Sheets Bags/ Case
NON-WOVEN TECHNOLOGIES									
W12	12x16 in 30x40 cm	Polyester Cellulose blend	Waffled	15.4	250	No	No	No	50/5
W11	8.5 x 11 in 21 x 28 cm	Polyester Cellulose blend	Smooth	18	280	No	No	No	100/6
W66	6x6 in 15x15 cm	Polyester Cellulose blend	Smooth	15.4	250	No	No	No	50/25
W99	9x9 in 23x23 cm	Polyester Cellulose blend	Smooth	15.4	250	Yes	Yes	Class 100	300/12
W99CP	9x9 in 23x23 cm	Polyester	Smooth, soft	0.2	332	Yes	Yes	Class 100	300/8
W88	8x8 in 20x20 cm	Composite	Quilted, shiny	120	490	Yes	Yes	Class 100	100/12
W69MA	6x9 in 15x23 cm	Reticulated Foam 100ppi	Coarse	200	730	No	No	No	25/30
POLYESTER TECHNOLOGIES									
W99PP	9x9 in 23x23 cm	Polyester	Smooth, thin, soft	2.4	319	Yes	No	Class 10	150/8
W99HD	9x9 in 23x23 cm	Polyester	Smooth, Thick	2.6	321	Yes	No	Class 10	150/5
W99SE	9x9 in 23x23 cm	Polyester	Smooth, Thick	2.4	478	Yes	No	Class 10	150/5
W99PQS	9x9 in 23x23 cm	Polyester	Quilted	14.6	945	Yes	No	Class 10	100/5
COTTON									
W99TJ	9x9 in 23x23 cm	Cotton	Linen-like	129.5	219	Yes	No	Class 1000	300/12



▲ Micro Care's flat wipes are rugged, non-woven paper that easily absorbs excess solvent, fluxes, solder paste, grease and oils. Almost impossible to tear. Never leaves lint, even on through-hole boards. ESD-safe when wet.

Swabs



SWABS

Micro Care Part #	Swab Material	Head Size (W x L) (in.) (mm)	Handle Size (inches) (mm)	Bonding Method	Clean-Room Packaging?	Quantity-Bag/ Case
CLEANROOM SWABS						
WS301	Prelaunched Polyester	1/4 x 3/4 in 6x19 cm	6 in 14 cm	Heat & Pressure	Yes	50/10
WS302	Prelaunched Polyester	1/8 x 1/2 in 4x12 cm	3 in 7 cm	Heat & Pressure	Yes	50/10
WS303	Prelaunched Polyester	1/16 x 1/2 in 2x12 cm	3 in 7 cm	Heat & Pressure	Yes	50/10
ECONOMY SWABS						
WS501	Cotton Q-Tip Style	1/4 x 5/8 in 4x16 cm	6 in 14 cm	Glue	No	1000/10
WS502	Cotton Q-Tip Style	3/16 x 1/2 in 4x12 cm	3 in 7 cm	Glue	No	1000/10
SYNTHETIC SWABS						
WS201	Non-reticulated Foam	5/8 x 1 in 16x25 cm	5.25 in 13 cm	Heat w/ Hot Melt	No	50/10
WS202	Reticulated Foam	1/2 x 1 in 12x25 cm	5 in 12 cm	Heat w/ Hot Melt	No	50/10
WS203	Non-reticulated Foam	1/8 x 1/2 in 4x12 cm	4 in 9 cm	Epoxy	No	50/10
WS204	Non-reticulated Foam	1/4 x 3/4 in 6x19 cm	4.5 in 11 cm	Epoxy	No	50/10
WS205	Foam & Cotton	3/16 x 1/2 in 4x12 cm	3 in 7 cm	Heat w/ Hot Melt	Yes	50/10
WS206	Foam & Cotton	3/8 x 1 in 10x25 cm	6 in 14 cm	Heat w/ Hot Melt	Yes	50/10
ESD SWABS						
WS101	Reticulated Foam	3/4 x 7/8 in 19x22 cm	6 in 14 cm	Heat & Pressure	No	100/5
WS104	Reticulated Foam	1/8 x 3/4 in 4x19 cm	4.25 in 11 cm	Heat & Pressure	No	500/1

We're Giving Away Our Single Most Important Product – Absolutely Free!



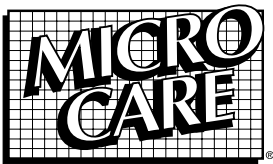
The most important product we offer at Micro Care is our expertise. We've been to thousands of factories. In dozens of countries. With every type of production arrangement you can imagine. We've helped them all, and now we've compiled that knowledge into the industry's most useful web site.

The Micro Care web site is a potent example of how we lead the industry. Look for:

- Technical articles and case histories
- Product specifications for every cleaner and package
- MSDS sheets in up to eleven languages
- A proprietary "Solvent Selection Guide" which determines the best solvent for your application
- And, most usefully, a Cost Calculator which helps you determine your true benchtop cleaning costs.

The web site is easy to navigate, jargon-free and fun to use. Just like the rest of Micro Care, our web site works a little bit harder to get you the answers you need at a price you can afford.

www.microcare.com



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