

# **BGA Stencil Cleaner**

# It's No Surprise: A Better Tool Delivers Faster, Better Stencil Cleaning



The BGA Stencil Cleaner is a strong, nonflammable solvent engineered for manually cleaning fine-pitch SMT and BGA stencils

- Great on All Pastes, Including Lead-Free and No-Clean
- Loosens Pastes from the Smallest Apertures, Without Residues
- Low Aroma and Slower Drying for Optimal Tack-Time
- Nonflammable, Noncorrosive
- A Huge Time-Saver that Out-Performs Alcohol Cleaners

#### **General Information**

MicroCare's premier stencil cleaner is a versatile, water-based solvent optimized for pastes, inks and epoxies. Because it works better, the cleaning is faster, so defects go down and throughput jumps. In short, this product enhances productivity, boost yields and lowers production costs.

#### **About the Product**

The BGA Stencil Cleaner blends safe,

nonflammable water-based ingredients with aggressive, proprietary alcohols. The result is a powerful cleaner which is ideal for stencils, frames, boards and the stencil printer itself. It removes all solder pastes — including lead-free materials — plus epoxies and some inks. This powerful cleaner minimizes the risk of damage to stencils from scrubbing with weaker cleaners.

The Stencil Cleaner is optimized for room temperature cleaning; it needs no heat to be effective. It has almost no aroma and the tack-time has been optimized for stencil cleaning. It delivers excellent results in ultrasonic systems and dip tanks because it is a nonfoaming cleaner, unlike many other water-based products. Many customers use Stencil Cleaner as a general-purpose solvent, cleaning stencil printers, misprinted PCBs, workbenches and tools, CRTs, keyboards and other assembly and test equipment,

Safe on all metals, synthetics, plastics and elastomers, the BGA Stencil

Cleaner leaves no residues and is noncorrosive. It will, however, remove stencil alignment markings if they were made with water-based inks. The cleaner is nonflammable and generally safe for people to use. With excellent environmental characteristics, the BGA Stencil Cleaner is a sophisticated choice.



#### **Technical Details**

Chemical Family

Appearance

Aroma

Boiling Point

Percent Volatile

Water-based

Colorless Clear Liquid

Slight, aromatic

>97° C / 208° F

100%

#### **Health, Safety & Environmental Data**

**Toxicity Rating** None assigned Flashpoint (TCC) Safety Rating Nonflammable **NFPA** Health: 0; Fire: 0; Reactivity: 0 Ozone Impact VOC Content (g/L) 224 REACH and ELINCS Compliant Yes RoHS and WEEE Compliant Yes **SNAP Approved** Not Applicable

#### **Packaging**

 Pump Spray
 12 oz. / 340 g
 MCC-BGA

 Minicube
 7 lbs. / 3.15 k
 MCC-BGAG

 Cubitainer
 32 lbs. / 14.51 k
 MCC-BGAP

 Drum
 400 lbs. / 181.4 k
 MCC-BGAD

This product is packaged in the refillable pump sprayer (photo, left). The refillable pump sprayers are packaged in cases of ten (10) cans per box. Money-saving refills are packaged in Micro Care's unique, easy-pouring "cubitainers" which reduce the risk of spills and minimize injuries from lifting heavy containers. Refills are available in the sizes, shown above.

The shelf life for all of these products is unlimited

Each case of pump sprayers are packaged with 100 sheets of the recommended lint-free wipe for benchtop cleaning of tools and test equipment. Bulk products do not come with lint-free wipes.

Shake before use. The cleaner will separate over time; momentary shaking will return the solvent to a completely mixed condition. For this reason, this product is not suited for use in automatic stencil printers. In bulk cleaning machines, ensure the solvent is agitated before pouring it into the machine or the solvent may foam during use.

#### Related Products

For stronger cleaning, switch to the **Reflow Oven Cleaner**, a water-based solvent that's engineereed to use heat to enhance cleaning. This speeds cleaning and reduces waste. A wide variety of lint-free wipes and stencil rolls also are available from MicroCare.

#### Product Notes

 $\label{eq:AVAILABILITY.} A VAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <math display="block">\underbrace{www.MicroCare.com}_{} \text{for details}.$ 

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## MicroCare Corporation

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On the Web: www.MicroCare.com





# **Reflow Oven Cleaner**

# Uses Free Residual Heat to Speed Cleaning on Ovens, Pallets, Conveyors



The Reflow Oven Cleaner is more powerful and highly cost-effective because it leverages the residual heat of the oven to speed the cleaning process

 Great on All Pastes, Including Lead-Free and No-Clean

- Slower Drying for Maximum Throughput and Optimal Tack-Time
- Highly Economical
- Nonflammable for Safety
- Out-performs Alcohol

#### **General Information**

The Reflow Oven Cleaner uses the heat of the ovens, solder machines, pallets and conveyors to speed the cleaning of these essential systems. Because it cleans better with less effort, this cleaner boosts productivity and lowers costs.

#### **About the Product**

The Reflow Oven Cleaner attacks charred, baked-on flux residues with a mix of water, alkaloids and proprietary long-chain alcohols. This cleaner becomes more active when heated. Since most reflow ovens are

already warm, using that latent heat makes the cleaning process faster and the results better. When compared to flammable alcohol cleaners, Reflow Oven Cleaner slashes cleaning times 50% while improving results.

Using alcohol on reflow ovens makes the cleaning more difficult. Alcohol actually cures the flux residues in the oven, so the chore becomes slower and harder after each cleaning cycle. The Reflow Oven Cleaner cuts through the residues and actually makes the process easier over time. It's simply a better tool, so it's easier for techs do a better job. Similarly, because this cleaner is nonflammable, it often is used to replace alcohol in the finger cleaning systems of wave solder machines. It also is used on pallets, conveyors, flux condensers, baffles, heating elements, clamps, chains, pulleys, gears and bousings. It is suitable for band wising or ultragenia.

housings. It is suitable for hand-wiping or ultrasonic dip tanks.

This product removes all flux residues. The cleaner dries quickly, leaves no residues and is noncorrosive. It is a sophisticated, ozone-safe, environmentally progressive cleaning choice.



#### **Technical Details**

Chemical Family
Aqueous Blend
Appearance
Clear Liquid
Aroma
Mild, aromatic
Boiling Point

Aqueous Blend
Clear Liquid
Mild, aromatic

#### **Health, Safety & Environmental Data**

Toxicity Rating (ppm, 8-hr., TWA, PEL) See MSDS Flashpoint (TCC) None Safety Rating Nonflammable NFPA Ratings Health: 1; Fire: 0; Reactivity: 0 Ozone Impact Non-exempt Organic Content (g/L) 495 **REACH and ELINCS Compliant** Yes RoHS and WEEE Compliant Yes **SNAP Approved** Not Applicable

#### **Packaging**

 Pump Spray
 12 oz. / 340 g
 MCC-ROC

 Minicube
 7 lbs. / 3.16 k
 MCC-ROCG

 Cubitainer
 30 lbs. / 13.6 k
 MCC-ROCP

 Drum
 436 lbs. / 197.8 k
 MCC-ROCD

This product is packaged in the refillable pump sprayer (photo, left). The refillable pump sprayers are packaged in cases of ten (10) cans per box. Money-saving refills are packaged in Micro Care's unique, easy-pouring "cubitainers" which reduce the risk of spills and minimize injuries from lifting heavy containers. Refills are available in the sizes shown above.

The shelf life for all of these products is unlimited.

Each case of pump sprayers are packaged with 100 sheets of the recommended lint-free wipe for benchtop cleaning of tools and test equipment. Bulk products do not come with lint-free wipes.

Shake before use. Not recommended for use in stencil printers. Ensure the solvent is agitated periodically or the solvent will foam during cleaning. For best results, use when the oven or wave solder machine is warm but not hot (approx. 45°C / 107°F). Always wear gloves when working near solder paste.

This cleaner is optimized for heated applications. In bulk cleaning machines, the solvent can be warmed to 60°C/140°F for extremely effective cleaning. In a cold dip tank, heat the cleaner with an immersion heater. A 240 volt, single-phase immersion heater will raise 30 gals./ 110 liters of solvent to 45°C / 107°F in two hours. Available from Pearse-Bertram, Bloomfield CT USA at 860.242.7777.

#### **Related Products**

For milder, nonflammable cleaning, switch to the *BGA Stencil Cleaner*, a waterbased solvent that's designed for manual cleaning of stencils and tools. A wide variety of *lint-free wipes* and *stencil rolls* also are available from MicroCare.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="https://www.MicroCare.com">www.MicroCare.com</a> for details.

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# Micro•Freeze™ EU & Big•Blast™ EU

# **Fast, Convenient and Environmentally Progressive**



Micro•Freeze<sup>:...</sup> and Micro•Blast<sup>...</sup> are drop-in replacements for today's old-style "canned air" and freeze spray aerosols.

 Totally New Chemistry for Circuit Cleaning and Troubleshooting

- F-Gas Rule Compliant
- REACH & ELINCS Pre-Registered
- Nonflammable for Safety
- Available Only from MicroCare

#### **General Information**

These two products are the latest innovation in freeze sprays and "canned air." They are the first electronics cleaners in the world to feature tetrafluoropropene, an innovative new hydrofluoro-olefin (HFO) propellant with a very low global warming potential (see "Packaging"

notes). Available only in Europe, these products comply with the EU's new regulations to minimize global warming caused by industrial gasses (the "F-Gas rules").

MicroCare's products are excellent choices for trouble-shooting, cleaning and repairing electronics. They can be used on electronics, connectors, medical devices, keyboards, keypads, mechanical parts and hard-to-clean surfaces.

The propellant is double-filtered to 0.2 microns of purity. The products are noncorrosive, residue-free and, unlike less expensive products, are not flammable which enhances safety.

#### Freeze Sprays

Micro•Freeze™ chills components instantly. It meets the mil spec target of -40°C and can get as low as -60°C under optimal conditions. Use Micro•Freeze to cool components, to test them for stress fractures and for troubleshooting intermitant failures on PCBs. This product is StatZAP™ compatible (#MCC-ZAP), for improved ESD control.

#### **Canned Air**

Micro•Blast™ delivers reliable cleaning of dry contaminates. Nonabrasive Micro•Blast quickly removes dust, lint, dirt and other dry material from electronics and mechanical devices. The cans are equipped with a high-flow valve which enables significantly more "pushing power" than traditional aerosols.



#### **Product Details**

Chemical Family Tetrafluoropropene HFO (CAS #1645-83-6; ELINCS #471-480-0)

Aroma Slight, ethereal Boiling Point -19° C

Evaporation Rate >>1 Vapor Pressure @ 20°C 4220 hPa

Micro\*Freeze will deliver circuit chilling to as low at -40°C/-40°F under all conditions and as low as -60°C/-76°F under optimal conditions with a skilled operator.

#### **Health, Safety & Environmental Data**

Toxicity Rating (ppm, 8-hr. TWA, REL) 1000

(Manufacturer specified)

Flashpoint (TCC) None Safety Rating Nonflammable

(ASTM ME-681, EU A-11)

NFPA Ratings Health: 1; Fire: 0; Reactivity: 1
Ozone Impact Zero
Non-Exempt Organic Content (g/L) Zero
Global Warming Rating (100 yr) 6

Global Warming Rating (100 yr) 6
REACH & ELINCS Pre-Registered (See MSDS) Yes
RoHS and WEEE Compliant Yes

F-Gas Compliant Yes

#### **Packaging**

Micro•Freeze™ Circuit Chiller 300 g MCC-FRZ107 Big•Blast™ Canned Air 300 g MCC-AIR107

These two products replace all earlier versions of these products packaged with HFC-134a. Packaged in cases of twelve (12) cans per box. Shelf life is unlimited. The propellant in these aerosols is one of the first F-gas rule compliant propellants, tetrafluoropropene (CAS#1645-83-6; ELINCS#471-480-0). Tetrafluoropropene is a drop-in replacement for HFC-134a (the industry standard for these products) and/or HFC-152b. It has a global warming impact of six (as opposed to a rating of 1,400 of HFC-134a) and does not contain smog-causing VOCs. The tetrafluoropropene formulation is protected under patent-pending status in the U.S.

Importantly, these products do not require the extra-strength high-pressure aerosol cans competing products use, and so are easier and less expensive to ship.

Micro•Freeze is compsatible with the StatZAP $^{\intercal}$  dispenser, #MCC-ZAP, to minize damage from static charges. Big•Blast is not StatZAP $^{\intercal}$  compatible.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors across Europe. Contact your local distributor at <a href="https://www.MicroCare.com">www.MicroCare.com</a> for details.

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# The Amazing TidyPen®

# Incredibly Convenient, Now You Can Quickly & Easily Remove Anything Sticky



Each TidyPen® features a strong, natural, citrus solvent which easily removes almost anything sticky - glues, tape residues or even tar

Fast Working and Easy to Use

Mild, Pleasant Citrus Aroma

Convenient Size - Use Anywhere

Planet-Safe and Recyclable

Long-Lasting — Unlimited Shelf Life

A Huge Time-Saver

#### **General Information**

lastina. inexpensive and convenient, the TidyPen® is a great answer to many exasperating cleaning problems. A TidyPen can quickly remove almost any sticky residues, without fuss or a lot of elbow grease.

#### **About the Product**

Every TidyPen contains a highlyrefined, patented citrus adhesive remover, so it is ozone-safe, non-toxic and biodegradable. Each pen dispenses the solvent precisely, giving the user total control over where the solvent goes and the quantity dispensed. The powerful

cleaner easily removes labels, tapes, adhesives, bar code labels, Kapton® residues, conductive glues, chewing gum, tar, tree sap and much more. Nonstaining TidyPens are not plastic-safe, so test on soft plastics before using.

A TidyPen eliminates messy chemicals, fumes, odors and spills, and TidyPens speed cleaning while boosting quality. TidyPens fit in desk drawers, briefcases, computer bags, shirt pockets and tool box, so they're always conveniently at hand. They're great on the production line and benchtop, in tool kits and labs, even offices and homes. They are used by techs, inspectors, foremen and office workers around the world.

TidyPens are planet-friendly. The cleaner is nontoxic, natural and biodegradable. Plus the packaging is great - each pen is made from unbreakable aluminum, so they are spill-proof, easily recycled and last forever. In short, nothing handles sticky problems faster, more easily or less expensively than the amazing TidyPen.



#### **Technical Details**

Chemical Family Terpene Hydrocarbons Appearance Clear, free-flowing liquid Aroma Citrus **Boiling Point** 169°C / 340°F

#### Solvency & Cleaning Data

Cleaning Strength (K<sub>b</sub>) 67 Specific Gravity (@ 25°C) 0.85 Surface Tension (dvnes/cm)

#### Health, Safety & Environmental Data

Toxicity Rating (ppm, 8-hr. TWA, PEL) None (GRAS) Safety Rating Combustible Flashpoint (COC) 47°C / 117°F **NFPA** Health: 1; Fire: 2; Reactivity: 0 Ozone Impact 890 Organic Content (g/L) RoHS and WEEE Compliant Yes **SNAP Approved** Yes

#### Material Compatibility (Partial Listing):

Little or No Effect: Glass, Paper, Polyethylene, Cardboard, Metals, Polypropylene, Teflon®, Polyallomer, Acetates, Tefzel®, Polysulfone

Moderate Effect: Polycarbonates, PVC, Low-Density Polyethylene Not Recommended: Polymethylpentene, Polystyrene, Rubber, Silicones, Viton®

Each TidyPen, 14 mL MCC-P01 Package of Three Pens L80881 Bag of 25 Spare Chisel Nibs MCC-P40C Bag of 25 Pencil-Point Nibs MCC-P40P

Note: TidyPens come in boxes of ten pens, except for #L80881, which is a self-sealing mailer containing three pens. Shelf life is unlimited.

#### **Related Products**

Lint-free wipes from MicroCare are recommended for industrial users of the TidyPen. The W66 wipe, the FiberCare mini-tub perforated wipes, and the FiberAide hermetically sealed wipes are all excellent choices. For plastic-safe cleaning of silicones, VeriClean™ is a fast-drying choice. For removing inks, ScreenClean™ is the best choice.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at www.MicroCare.com for details.

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# **ProClean**™

# **Unexpectedly Sophisticated Cleaning from a Blend of Traditional Alcohols**



ProClean™ is often selected for benchtop cleaning because it offers moderate cleaning power and easy handling at a very affordable price

- More Powerful than Ordinary Alcohol Solvents
- Familiar Handling, Drying and Aroma
- Safer Toxicity Ratings than Ordinary Alcohol (IPA)
- Extremely Economical

#### **General Information**

ProClean™ is a mild circuit cleaner made from a unique blend of pure alcohols. Safe for components, it cleans thoroughly and easily. People-safe ProClean is a great, affordable choice.

#### **About the Product**

A combination of three ultra-pure alcohols, ProClean is a mild, plasticsafe, low-cost defluxer. Because it

is a mixture of alcohols and they are ultra-pure — double-filtered and with less than 1% water — ProClean delivers unexpectedly strong cleaning. (Many alcohol cleaners are 30% water, which lowers costs but weakens the solvent.) ProClean also is 100% volatile, so rinsing is never required.

ProClean works well on rosin fluxes, synthetic fluxes and most "no-cleans" but may not be strong enough for lead-free materials. It easily dissolves most flux residues, solder pastes, organic residues and oils. Non-corrosive and ESD-safe, ProClean is compatible with all materials and substrates and is used on stencils, components, boards, displays, cables and connectors.

Importantly, ProClean is Trigger Grip™ compatible (see photo), which generally doubles the life of the aerosol by eliminating wasteful over-spray. ProClean also is available in a presaturated wipe, containing 100 sheets of

lint-free polyester fabric. The hermetically-sealed tub has an industry-leading shelf life, and the self-closing lid keeps the wipes damp during use. Money-saving refills lower replacement costs 25% or more.

Made from renewable resources, ProClean is biodegradable, ozone-safe and a modern choice for today's advanced circuit boards.



#### **Technical Details**

Chemical Family
Appearance
Aroma
Boiling Point
Mill-P-28809,MIL-S-45743, MIL-P-46843
Traditional Alcohols
Clear Colorless Liquid
Characteristic Alcohol
77°C / 173° F
MIL-S-2800, MIL-S-45743, MIL-P-46843

#### **Solvency & Cleaning Data**

Cleaning Strength (Kb)	45 (est)
Specific Gravity (@ 25°C)	Ò.79
Surface Tension (dynes/cm)	23
Percent Volatile	100%
Vapor Density (Air=1)	1.82
Evaporation Rate (Ether = 1)	<1
Water Content	<400 npm

#### **Health, Safety & Environmental Data**

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Toxicity Rating (ppm,	8-Hr. TWA, PEL)	See MSDS
Flashpoint (TCC)		12°C / 53°F
Safety Rating		Flammable
NFPA	Health: 1; Fire:	3; Reactivity: 1
Ozone Impact		Zero
Organic Content (g/L		785
RoHS and WEEE Com	npliant	Yes
SNAP Approved		Not applicable

#### **Packaging**

Aerosol	12 oz./340 g	MCC-PRO
Aerosol with Brush	12 oz./340 g	MCC-PRO126
Presat. Wipes	30 oz./ 840 g	MCC-PROW
Presat. Wipe Refill	30 oz./ 840 g	MCC-PROWR
Minicube	6 lbs./2.72 k	MCC-PROG
Cubitainer	32 lbs./14.51 k	MCC-PROP
Drum	355 lbs./161.4 k	MCC-PROD
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The aerosol cans are packaged in cases of twelve (12) cans per box. The presat wipes are packaged in cases of twelve (12) tubs per box. The presat refilis also are 12 units/box, but include one brand-new empty presat tub. The presat wipes have a one-year shelf life; all other packages have an unlimited shelf life.

#### Related Products

ProClean is not suited for use in heated cleaning systems. For vapor degreaser applications, *Flux Remover C* is the best choice. For heated dip tanks, MicroCare's *Reflow Oven Cleaner* or the popular *BGA Stencil Cleaner* are excellent options.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="https://www.MicroCare.com">www.MicroCare.com</a> for details.

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# IsoClean™

# **Ultra-Pure Isopropyl Alcohol Delivers Superior Cleaning at an Affordable Price**



IsoClean<sup>™</sup> is pure isoproyl alcohol, the benchmark for general electronics cleaning

- Versatile Defluxer & Circuit Cleaner
- Speedy Stencil Cleaner
- Familiar Handling
- Plastic-Safe
- Mil-Spec Approved
- Very Affordable

#### **General Information**

IsoClean™ is an alcohol-based circuit cleaner. Mild and inexpensive, it cleans easily, quickly and safely. For affordable and effective cold cleaning which will never harm components, IsoClean is an excellent choice.

#### **About The Product**

IsoClean is a modest, affordably-

priced cleaner for fluxes, pastes, light oils and grease, plus organic residues, ionic deposits and oils. Noncorrosive and ESD-safe, it is most often used as circuit cleaner, a stencil cleaner, and as cleaner for video- and audio-recording systems.

Based on isopropyl alcohol (IPA), IsoClean is made from only the cleanest "anhydrous" grade of IPA. Whereas many IPA-based cleaners contain up to 30% water, which is cheaper, IsoClean is virtually water-free so it's surprisingly strong. In addition, the cleaner is undiluted by airborne humidity. This makes IsoClean an excellent cleaning choice.

100% volatile, IsoClean evaporates cleanly and rinsing is never required. IsoClean is safe on all of the materials found in today's electronics, including components, connectors, cables and elastomers. It is an excellent choice for repair depots where a wide variety of components and materials are found.

Importantly, IsoClean is Trigger Grip™ compatible, which generally doubles

the life of the aerosol can by eliminating wasteful overspray during cleaning. Completely ozone-safe and low in global warming impact, IsoClean is gentle on the planet. The cleaner is regulated as a Volatile Organic Compound (VOC); check local regulations for details.



#### **Technical Details**

Appearance Clear, Colorless Liquid
Aroma Characteristic Alcohol
Boiling Point 77°C / 173°F
Military Approvals MIL-STD-2000A, WS-6536,
MIL-P-28809, MIL-S-45743, MIL-P-46843

#### **Solvency & Cleaning Data**

Cleaning Strength ( $K_b$  Value ) n/a Specific Gravity (@ 25°C) 0.79 Percent Volatile 100% Evaporation Rate (Ether = 1) <1 Water Content <200 ppm

#### **Health, Safety & Environmental Data**

400 Toxicity Rating (ppm, 8 hr., TWA, AEL) Flashpoint (TCC) 12°C / 53°F Safety Rating Flammable Health:1; Fire: 3; Reactivity: 1 **NFPA** Ozone Impact Zero Organic Content (g/L) 785 RoHS and WEEE Compliant Yes **SNAP Approved** Yes

#### **Packaging**

 Aerosol
 12 oz./340 g
 MCC-BAC

 Pump Spray
 12 oz./340 g
 MCC-BAC16

 Minicube
 6 lbs./2.72 kg
 MCC-BACG

 Cubitainer
 32 lbs./14.5 kg
 MCC-4724

 Drum
 355 lbs./161.0 k
 MCC-4725

The shelf life is unlimited for these products. The aerosol product is packaged in cases of twelve (12) aerosols per box, but the pump spray product, MCC-BAC16, is packaged 24 pump sprays/case. Unlike other MicroCare pump sprays, this product does not ship with any flat wipes.

#### Related Products

For faster drying, *VeriClean™* is an excellent choice. For stronger cleaning, *PowerClean™ II* is best. Lint-free wipes are recommended for us with slower-drying IsoClean™.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="https://www.MicroCare.com">www.MicroCare.com</a> for details.

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# Micro•Freeze™ & Micro•Blast™

Anti-Stat Micro•Freeze<sup>™</sup> — Micro•Blast<sup>™</sup> Canned Air Big•Blast<sup>™</sup> Canned Air — Mini•Blast<sup>™</sup> Canned Air



#### **General Information**

These products are ozone-safe drop-in replacements for old-style freeze sprays and "canned air." The freeze sprays offer instant chilling and the canned air products deliver vigorous pressure. These are excellent choices for testing and repairing electronics; all are completely ozone-safe.

#### Freeze Sprays

Both Micro•Freeze products deliver instant chilling without CFCs, HCFCs, compressed air or venturi systems. Both exceed the mil specs of -40°C/-40°F and may chill to as low as -60°C/-76°F under optimal conditions. Neither choice will leave residues, attack plastics or generate component-shattering thermal shock. The Anti-Stat Micro•Freeze is identical to Micro•Freeze, but includes a static-dissipative additive that evaporates in about sixty seconds.

#### **Canned Air**

The "canned air" products deliver about 100 psi/7 bar of pressure directly on to the component. Big•Blast uses an economical, jumbo-size container of 392 grams. Both are equipped with the latest in high-pressure valves which allow the inert propellant to generate enormous "pushing power", but StatZAP™ valves are available for better ESD control.

#### **Health & Safety**

All of these products are ozone-safe, inert chemically and very safe for people. Noncorrosive and plastic-safe, they can be used on all electronic assemblies. Unlike less expensive products, none of these are flammable.



#### **Product Details**

Chemical Family
Aroma
Slight, ethereal
Boiling Point
Evaporation Rate
Vapor Pressure @ 20°C

Hydrofluorocarbon
Slight, ethereal
-26° C / -16° F
Instant
Vapor Pressure @ 20°C

Micro\*Freeze will deliver circuit chilling to as low at -40°C/-40°F under all conditions and as low as -60°C/-76°F under optimal conditions with a skilled operator.

#### **Health, Safety & Environmental Data**

1000 Toxicity Rating (ppm, 8-hr. TWA, TLV) Flashpoint (TCC) None Safety Rating Nonflammable **NFPA** Health: 1; Fire: 0; Reactivity: 1 Primary Ingredient HFC-134a Ozone Impact Zero MCC-FRZA Organic Content (g/L) 12 All others 0 RoHS and WEEE Compliant Yes **SNAP Approved** Yes

#### **Packaging**

Micro•Freeze™ Freeze Spray 284 g MCC-FRZ\* Micro•Freeze™ Anti-Stat 284 q MCC-FRZA\* Mini•Blast™ Tool-kit Size 85 q MCC-DSTS\* Micro•Blast™. High-Flo Valve 284 g MCC-DST Micro•Blast™, StatZap™ Valve 284 g MCC-DSTZ\* Big•Blast™, High-Flo Valve 392 q MCC-AIR Big•Blast™, StatZap™ Valve, European Label 392 g MCC-DAIRZ\*

Packaged in cases of twelve (12) cans per box. Shelf life is unlimited.

#### **Related Products**

MicroCare strongly recommends the StatZAP™ dispenser, #MCC-ZAP, with these products because it minimizes the risk of ESD damage. Products tagged with an asterisk are StatZAP™ compatible.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="https://www.MicroCare.com">www.MicroCare.com</a> for details.

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# Axarel® 2200

# A Powerful, Proven Choice for Benchtop Cleaning and Stencil Printing



One of MicroCare's most mature products, Axarel® 2200 has been a reliable, cost-effective circuit cleaner for two decades

- Versatile a Defluxer, Degreaser
   & Stencil Cleaner All in One
- Highly Effective on Lead-Free Fluxes & Pastes
- Low-Surface Tension for Better Cleaning under Tight Chips
- Plastic-Safe & Residue-Free

#### **General Information**

Axarel® 2200 is a proven benchtop defluxer and stencil cleaner that has been satisfying customers for almost two decades. A versatile, powerful choice, Axarel 2200 is convenient, easy to use and safe for the environment.

#### **About the Product**

Blended from aliphatic hydrocarbons, Axarel 2200 is an ozone-safe defluxer specifically designed for precision cold cleaning. Many times stronger than alcohol, Axarel works well on both leaded and lead-free materials. Both organic and ionic residues are easy targets for Axarel.

It dissolves all the common contamination and can be used safely on stencils, PCBs, hybrids, connectors, components, elastomers, wiring and housings. It serves double-duty as a degreaser, so it is a great choice for repair depots.

One of the most popular uses of Axarel is for cleaning stencils, misprints and production equipment. It is a fine solvent choice for inside an automated stencil printer, and will not harm the stencils, webbing or printers. In general, it safe on most components, FR-4, epoxies, nylon, polyethylene, polypropylene and PVC, but it may soften some soft plastics. Test before deployment.

Axarel dries more slowly than alcohol which minimizes consumption and

saves money. It also is Trigger Grip™ compatible, which generally doubles the life of the aerosol can, effectively making it half the price of competing cleaners. It is ozone-safe and has a short atmospheric life. All of this makes Axarel a superior choice for most benchtop and stencil cleaning applications.



#### **Technical Details**

Chemical Family	Mixed Hydrocarbon
Appearance	Clear Colorless Liquid
Aroma	Slight, Sweet Alcohol
Boiling Point	149°C / 300°F

#### **Solvency & Cleaning Data**

Cleaning Strength (K <sub>b</sub> )	115 (est)
Specific Gravity (@ 25°C)	0.82
Surface Tension (dynes/cm)	17
Percent Volatile	100%
Evaporation Rate (Butyl Acetate = 1)	0.32

#### **Health, Safety & Environmental Data**

Toxicity Rating (ppm,	8-hr. TWA, AEL)	100
Flashpoint (TCC)	,	44°C / 111°F
Safety Rating		Combustible
NFPA	Health: 1; Fire: 2	2; Reactivity: 0
Ozone Impact		Zero
Organic Content (g/L	)	785
RoHS and WEEE Cor	npliant	Yes
SNAP Approved		Yes

#### **Packaging**

Aerosol	10 oz./284 g	MCC-AXL
Minipail	6 lbs./2.72 k	MCC-AXLG
Pail	35 lbs./15.87 k	MCC-AXLP
Drum	365 lbs./165.9 k	MCC-AXLD

The aerosol cans are ackaged in cases of twelve (12) cans per box. All Axarel products have an unlimited shelf life.

#### **Related Products**

MicroCare strongly recommends the Trigger Grip $^{TM}$  dispenser, #MCC-ESD, with our aerosol cleaners because it speeds cleaning and reduces solvent waste. For plastic-safe cleaning,  $VeriClean^{TM}$  is a fast-drying alternative to Axarel. For stencil cleaning, BGA Stencil Cleaner is a nonflammable choice. For presaturated cleaning, the  $ExPoxy^{TM}$  Remover Presaturated Wipes are the best choice for cleaning stencils and misprints. Axarel is not suited for use in heated cleaning systems. For those applications, Flux Remover C is the best choice. Contact MicroCare for details.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="https://www.MicroCare.com">www.MicroCare.com</a> for details.

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# VeriClean™

# Fast, Reliable Cleaning With the Industry's Most Universal Solvent



VeriClean™ is a medium-strength circuit cleaner with exceptional safety characteristics

- Speedy, Easy Defluxing and Circuit Cleaning
- Fast-Drying, Low Aroma
- Easily Removes Silicone Coatings & Glues
- Ozone-Safe, Low VOC and Low GWP
- Exceptional Safety Ratings

#### **General Information**

VeriClean™ is a moderately aggressive defluxer that removes a wide variety of contaminates quickly and safely. With excellent environmental properties and a very affordable price, VeriClean is a popular choice world-wide.

#### **About the Product**

VeriClean is the industry's only

circuit cleaner based on ultra-pure siloxanes. This makes it a highly effective defluxer, degreaser and general purpose cleaner. Versatile, residue-free VeriClean is used on fluxes, pastes, organic residues, ionics, silicone-based conformal coatings, adhesives, grease and oils. It is ideal for cleaning thruhole, BGA and SMT designs, and rinsing residues from connectors.

In side-by-side tests, VeriClean removed Alpha 5003 rosin flux in 1/3<sup>rd</sup> the time of other solvents. It also dissolves silicone conformal coatings, silicone adhesives and temporarily swells silicone tubing.

VeriClean is safe on all components. It is considered a "universal" cleaner that will not harm any substrate, material, connector or chip (except silicones), so it is popular in repair depots where the widest variety of materials are found. VeriClean dries briskly, leaves no residues and is non-corrosive.

Based on chemistries widely used in cosmetics, VeriClean is uniquely safe

for workers. It degrades quickly in the atmosphere so it does not contribute to low-altitude smog and is rated as "VOC exempt" in most areas (check local regulations for details). It is completely ozone-safe and has a very low global warming factor. VeriClean is a great choice for circuit boards and the planet.



#### **Technical Details**

Chemical Family	Methyl Siloxanes
Appearance	Crystal Clear Liquid
Aroma	Slight, ethereal
Boiling Point	98°C / 210°F

#### **Solvency & Cleaning Data**

17
0.77
100%
16.3
0.49
>1
14.55

#### **Health, Safety & Environmental Data**

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Exposure Limits (ppn	n, 8-Hr. TWA, AE	EL) 200
Flashpoint (TCC)		-4°C / 24°F
Safety Rating		Flammable
NFPA	Health: 1; Fire:	3; Reactivity: 0
Ozone Impact		Zero
Non-Exempt Organic	Content (g/L)	87
RoHS and WEEE Co	mpliant	Yes
SNAP Approved		Yes

#### **Packaging**

Aerosol	10 oz./284 g	MCC-DC1
Aerosol with Brush	10 oz./284 g	MCC-DC1106
Minipail	6 lbs./2.72 k	MCC-DC1G
Pail	32 lbs./14.5 k	MCC-DC1P
Drum	330 lbs./149.7 k	MCC-DC1D
The aerosols are packaged twelve (12) cans per box. Unlimited shelf life		

#### Related Products

MicroCare strongly recommends the Trigger Grip $^{TM}$  dispenser, #MCC-ESD, with our aerosol cleaners because it speeds cleaning and reduces solvent waste. For longer tack time, **ProClean** $^{TM}$  is an alcohol-based choice. For more powerful or faster cleaning, **PowerClean** $^{TM}$  **II** is the best choice.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="www.MicroCare.com">www.MicroCare.com</a> for details.

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# **ExPoxy™ Remover**

# A Powerful Stencil Wipe Choice for Removing Chip Bonder, Paste & Grease



ExPoxy™ Remover is an aggressive solvent for difficult stencil cleaning applications, such as finepitch or dense BGA designs

- The Strongest Cleaner In Its Class
- Great on Lead-Free Pastes, Chip Bonders & Some Inks
- Proven Reliable in Stencil Printer Wetting Systems
- Plastic-Safe. Noncorrosive

#### **General Information**

ExPoxy<sup>TM</sup> Remover has been an instant success since it was introduced a decade ago. Powerful and easy-to-use, it is your best choice for almost any difficult cleaning application.

#### yc

# About the Product The ExPoxy™ Remover is a powerful aliphatic hydrocarbon solvent designed for precision cold cleaning. Initially developed to remove uncured chip bonders, it has proven to be the most powerful and versatile solvent in its class. For

example, it is the best hydrocarbon solvent for cleaning solder paste from stencils and misprinted boards. It also is the best choice for use in automatic stencil printers because the highly activated cleaner needs less solvent to perform this cleaning chore. This formulation has been tested and accepted by DEK, EKRA, MPM, and Panasonic for use in their stencil printers.

The ExPoxy<sup>™</sup> Remover works well on leaded- and lead-free fluxes and pastes, water-soluble pastes and even "no-clean" products. Plastic-safe, residue-free and non-corrosive, ExPoxy<sup>™</sup> Remover is safe on PCBs, stencils, components, connectors and tools.

Many engineers specify the ExPoxy<sup>™</sup> Remover in the presaturated wipe for manually cleaning stencils and misprints during SMT production. The package features 100 sheets of a highly absorbent, lint-free, shred-resistant polyester fabric. The seamless plastic tub is hermetically sealed, so the wipes have

a industry-leading shelf life. The tub also features a self-closing lid, so the wipes stay damp during use. Money-saving refills (see photo) minimize waste and lower replacement costs 25% or more.



#### **Technical Details**

Chemical Family Alcoxypropanols
Appearance Clear, Colorless Liquid
Aroma Mild Alcohol
Boiling Point 248-302° F / 120-150°C

#### **Solvency & Cleaning Data**

Cleaning Strength ( $K_b$ ) 90 (est) Specific Gravity (@ 15°C) 0.88 Surface Tension (dynes/cm) 24.9 Evaporation Rate (Butyl Acetate = 1) 0.15

#### **Health, Safety & Environmental Data**

Toxicity Rating (ppm, 8-Hr TWA, PEL)

Flashpoint (TCC)

Safety Rating

NFPA

Health: 0; Fire: 2; Reactivity: 0

Ozone Impact

Organic Content (g/L)

RoHS and WEEE Compliant

See MSDS

41° C/ 106° F

Combustible

Tombustible

2ero

Reactivity: 0

890

RoHS and WEEE Compliant

Yes

SNAP Approved

Not applicable

#### **Packaging**

 Presat Wipe
 1.85 lb / 840 g
 MCC-EPXW

 Presat Wipe Refill
 1.85 lb / 840 g
 MCC-EPXWR

 Minipail
 6 lbs. / 2.72 k
 MCC-EPXG

 Pail
 30 lbs. / 13.6 k
 MCC-EPXD

 Drum
 392 lbs. / 177.8 k
 MCC-EPXD

The presat wipes are packaged in cases of twelve (12) tubs per box. The presat refills also are 12 units/box, but include one brand-new empty presat tub. The presat wipes have a one-year shelf life; all other packages have an unlimited shelf life.

#### **Related Products**

For plastic-safe cleaning, *VeriClean™* is a faster-drying alternative to ExPoxy Remover. For stencil cleaning in dip tanks, the nonflammable *BGA* Stencil Cleaner is a better choice. For precision cleaning in vapor degreasers, *Flux Remover C* is the best choice. Contact MicroCare for more details on the technical issues.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at www.MicroCare.com for details.

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# **SuprClean**<sup>™</sup>

# **Unleash Raw Cleaning Power to Lower Your Benchtop Cleaning Costs**



SuprClean™ II is a nonflammable solvent for difficult cleaning applications, and now is available in two aerosol packages

- Strong Enough for Lead-Free Fluxes & Pastes
- Instant Drying and Low Aroma
- No Residues, No Rinsing
- Nonflammable in Any Package or Application
- Versatile Both a Degreaser & Defluxer

#### **General Information**

SuprClean<sup>TM</sup> is a heavy-duty circuit cleaner and degreaser. This patented formulation offers superior results against the toughest contamination, while setting new standards for safety, stewardship and value.

#### **Technical Details**

Chemical Base HFC and trans Near-Azeotrope
Appearance Clear, Colorless Liquid
Aroma Slight, Ethereal
Boiling Point 41°C / 106°F

**Solvency & Cleaning Data** 

Cleaning Strength ( $K_b$ ) 110 Specific Gravity (@ 25°C) 1.26 Percent Volatile 100% Surface Tension (dynes/cm) 18.1 Evaporation (Ether = 1) >1

#### **Health, Safety & Environmental Data**

Exposure Limt (ppm, 8-hr. TWA, AEL) 256-297 (calc.) Nonflammable Safety Rating Flashpoint (TCC) None **NFPA** Health: 1; Fire: 1; Reactivity: 1 Ozone Impact Zero Organic Content\* (g/L) 939 RoHS and WEEE Compliant Yes SNAP Approved Yes Note: Test before prolonged use on urethanes, natural rubber, silicones, acrylics

# and polystryrene. Packaging

Aerosol 12 oz. / 340 g MCC-SPR Aerosol plus Brush 12 oz. / 340 g MCC-SPR126 Minipail 10 lbs. / 4.53 kg MCC-SPRG Pail 50 lbs. / 22.7 k MCC-SPRP Drum 500 lbs. / 226.8 k MCC-SPRD The aerosol products are packaged in cases of twelve (12) cans per box. The shelf life of all these products is unlimited.

Includes only non-exempt VOC ingredients.

#### **Related Products**

MicroCare strongly recommends the *Trigger Grip™* dispenser with our aerosol cleaners because it minimizes solvent consumption. For plastic-safe cleaning, *VeriClean™* is a fast-drying option. For stencils, *BGA Stencil Cleaner* is a better choice. For cleaning in vapor degreasers, *Flux Remover C* is best.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="www.MicroCare.com">www.MicroCare.com</a> for details.

TRADEMARKS. "MicroCare" and the MicroCare logo are registered trademarks of Micro Care Corp. "SuprClean" and "Trigger Grip" are trademarks of MicroCare Corp. The Trigger Grip is protected under various U.S. patents; SuprClean is protected under patent #6,852,684 and others.

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#### **About the Product**

Engineered to be the electronics industry's most versatile precision cleaner, SuprClean is as effective as perc and 1,1,1-TCA but is without the environmental problems of those older products. It's powerful, dries instantly and has almost no aroma, so technicians prefer it for the toughest jobs, such as SMT defluxing, degreasing and removing conformal coatings. Because it is so versatile, it is an ideal choice for tough, lead-free solders and pastes.

SuprClean often is used on through-hole, SMT and BGA boards, hybrids and connectors, and as a heavy-duty degreaser. Its gets under tight-fitting BGA chips, dissolving flux residues and flushing them away. SuprClean also removes most acrylic and some urethane conformal coatings.

While SuprClean is safe on most components, epoxies, nylon, polyethylene, polypropylene and PVC, it may craze soft plastics like ABS, polystyrene and polycarbonates. Test before deployment.

Importantly, SuprClean is safer than competing choices because it remains nonflammable in any packaging. It also is Trigger Grip  $^{\text{TM}}$  compatible (see photo), which generally doubles the life of the aerosol can, making SuprClean half the price of competing formulations.



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# Flux Remover C

# Nonflammable, Ozone-Safe Choice for the Benchtop & Heated Cleaning Systems



Flux Remover C is MicroCare's most popular aerosol cleaner, famous for its powerful cleaning and fast evaporation. It is the best choice to replace ozonedepleting HCFC-141b solvents

- Powerful Defluxing and Degreasing
- Generally Plastic-Safe
- Nonflammable in Any Package and Application
- Best Choice for Cleaning in Vapor Degreasers

#### **General Information**

Flux Remover C is the electronics industry's premier circuit cleaner. A superior defluxer, it is the best choice when both benchtop and bulk cleaning environments are used in the same facility. This versatility makes it the best replacement for HCFC-141b.

#### **About the Product**

Flux Remover C is MicroCare's most popular cleaner because it is

affordable, nonflammable, easy to use and safe to store. It features convenient handling, powerful cleaning, speedy drying and a very low aroma.

Suitable for all types of electronics, Flux Remover C can be used on throughhole, SMT and BGA boards, plus hybrids, cables and connectors. It is highly effective on no-clean fluxes, water-based fluxes, light oils, grease and inks. With a low surface tension and high density, this product gets under tight-fitting chips, flushing residues away. It can be used in heated cleaning systems.

Flux Remover C has a compatibility profile similar to HCFC-141b, so it is safe on components, epoxies, nylon, polyethylene, polypropylene and PVC, but may affect ABS, polystyrene and polycarbonates. Test before deployment.

With excellent health and safety ratings, Flux Remover C is safer than competing nonflammable choices because it remains nonflammable in any

package. (Some aerosols need to be reformulated to remain nonflammable when sold in pails.)

Flux Remover C also is Trigger Grip<sup>™</sup> compatible (see photo), which generally doubles the life of the aerosol can, eliminating waste and speeding cleaning.



#### **Technical Details**

Chemical Family	HFC Solvent Azeotrope
Appearance	Clear, Colorless Liquid
Aroma	Slight, Ethereal
Boiling Point	37°C / 99°F

#### **Solvency & Cleaning Data**

Cleaning Strength (K <sub>b</sub> )	25
Specific Gravity (@ 25°C)	1.34
Percent Volatile	100%
Surface Tension (dynes/cm)	19.2
Evaporation (Ether = 1)	>1

#### **Health, Safety & Environmental Data**

Toxicity Rating (ppm, 8	-Hr. TWA, PEL)	240 (calc.)
Flashpoint (TCC)		None
Safety Rating		Nonflammable
NFPA	Health: 1; Fire:	0; Reactivity: 1
Ozone Impact		Zero
Organic Content* (g/L)		590
RoHS and WEEE Comp	oliant	Yes
SNAP Approved		Yes

Note: Test before prolonged use on urethanes, natural rubber, silicones, acrylics and polystyrene.

\* Includes only non-exempt VOC ingredients.

#### **Packaging**

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TravelSAFE™ mini-	pump 3 oz. / 85 g	MCC-FRCS
Aerosol	10 oz. / 300 g	MCC-FRC
Aerosol with Brush	10 oz. / 300 g	MCC-FRC106
Pump Spray	10 oz. / 300 g	MCC-FRCNA
Minipail	10 lbs. / 4.53 k	MCC-FRCG
Pail	50 lbs. / 22.7 k	MCC-FRCP
Drum	500 lbs. / 226.8 k	MCC-FRCD

The aerosols and mini-pump cans are packaged in cases of twelve (12) cans per box. All of these packages have an unlimited shelf life.

#### **Related Products**

MicroCare strongly recommends the Trigger Grip™ dispenser, #MCC-ESD, with our aerosol cleaners because it speeds cleaning and reduces solvent waste.

#### **Product Notes**

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# **Heavy Duty Degreaser C**

# **Easy, Instant Cleaning of Organics with This Popular Choice**



This Degreaser is an aggressive but affordable solvent, designed to replace old-style ozone-depleting solvents

- Superior Materials Compatibility
- Instant Drying, No Residues
- Powerful Low Surface Tension and High Density Lifts Soils Away
- Nonflammable in Any Package and Use for Maximum Safety

#### **General Information**

Heavy Duty Degreaser C is a powerful degreaser based on patented technology from DuPont. This innovative formulation offers affordable, high-performance cleaning and is an excellent replacement for ozone-depleting HCFC-141b.

#### **About the Product**

Engineered as an affordable, powerful and nonflammable precision cleaner, Heavy Duty Degreaser C has been optimized for the removal of oil and grease.

Suitable on all types of metals, ceramics, glass, substrates and durable plastics,

Heavy Duty Degreaser C is an excellent choice for semiconductors, disk drives, gyroscopes, medical devices and any other application in which reliability and performance are crucial parameters. The product easily removes most oils, light grease, and lubricants, plus most coatings based on acrylics and silicones. It is generally safe on metal, glass, ceramics, most electronic components, epoxies, nylon, polyethylene, polypropylene and PVC, but may craze soft plastics like ABS, polystyrene and polycarbonates. Test before deployment. The cleaner generally is not suited for fluxes, inks and paints.

Noncorrosive, Heavy Duty Degreaser C dries almost instantly. It has excellent health and safety ratings and is suitable for use in heated cleaning systems such as vapor degreasers. This means it is safer than other choices because it remains nonflammable in any package or aplication. (Some aerosols must be reformulated to remain nonflammable in bulk.)

This cleaner can be used with the Trigger Grip™ dispenser, which generally doubles the life of the can by eliminating wasteful overspray. The product is completely ozone-safe, has a low global warming impact and a moderate VOC content.

COMPLIANT

#### **Technical Details**

Chemical Family	HFC Solvent Azeotrope
Appearance	Clear, Colorless Liquid
Aroma	Slight, Ethereal
Boiling Point	37°C / 99°F

#### Solvency & Cleaning Data

Cleaning Strength (K <sub>b</sub> )	22
Specific Gravity (@ 25°C)	1.34
Percent Volatile	100%
Surface Tension (dynes/cm)	18.8
Evaporation (Ether = 1)	>1

#### **Health, Safety & Environmental Data**

moditing Caroly & Ellin		
Exposure Limits (ppm,	8-Hr. TWA, PEL	.) See MSDS
Flashpoint (TCC)		None
Safety Rating		Nonflammable
NFPA	Health: 1; Fire:	0; Reactivity: 1
Ozone Impact		Zero
Organic Content* (g/L)		519
RoHS and WEEE Com	pliant	Yes
SNAP Approved		Yes

This product has been tested on a wide variety of substrates. No major incomatibilities were observed. Test before prolonged use on urethanes, natural rubber, silicones, acrylics and polystyrene.

\* Includes only non-exempt VOC ingredients.

#### **Packaging**

TravelSAFE™ mir	ni-pump 3 oz. / 85 g	MCC-HDCS
Aerosol	10 oz. / 300 g	MCC-HDC
Minipail	10 lbs. / 4.53 k	MCC-HDCG
Pail	50 lbs. / 22.7 k	MCC-HDCP
Drum	500 lbs. / 226.8 k	MCC-HDCD
The coronal and mini numb cope are pookeded in copes of twolve (12) cope per		

The aerosol and mini-pump cans are packaged in cases of twelve (12) cans per box. All of these packages have an unlimited shelf life.

#### **Related Products**

For general degreasing in dip tanks, the nonflammable *BGA Stencil Cleaner* is a very good choice. For general purpose surface cleaning, try the *Plastic, Metal and Glass Cleaner* from MicroCare. Flat surfaces can be wiped clean with the *Economy Wipes*, a tub of presaturated alcohol wipes. Lastly, for stronger cleaning, test the *PowerClean™ II* degreaser/defluxer.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="https://www.MicroCare.com">www.MicroCare.com</a> for details.

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# **Contact Cleaner C**

# **Universal Cleaner Rinses Away Dust, Fibers, Light Oils & Grime**



Contact Cleaner C is a mild, nonflammable solvent designed to flush dust, lint and light oils from hard-to-reach locations

• Convenient Cleaning for Those Hard-to-Reach Places

- Fast Drying
- No Aroma
- No Residues
- "Do No Harm" Compatibility

#### **General Information**

Contact Cleaner C is a mild, non-conductive general purpose electronics cleaner. Based on new solvent technology from DuPont, Contact Cleaner C sets new standards for cleaning, safety, environmental stewardship and cost-effectiveness.

#### **About the Product**

Contact Cleaner C is a versatile precision cleaner designed to be safely used on high-voltage systems, cable harnesses, punchdown blocks, power supplies, junction boxes, coax cables, and electronic systems which have been powered-down. A mild

cleaner, it has been optimized for the balance between cleaning effectiveness and maximum safety. After all, it's important to clean, but it's even more important to do no harm to either people or the electronics. So this cleaner is nonflammable and nonconductive, and if accidentally sprayed on operating electronics it will do no harm.

The cleaner dries instantly and is completely safe on soft plastics, rubber and elastomers; it even can safely clean computer screens, CDs and DVDs. This makes Contact Cleaner C ideal for awkward cleaning applications, such as rinsing grit from hot motors, dust from inside electromechanical relays, and removing light oils from machinery, keyboards and other electrical devices. It leaves no residues and is noncorrosive.

This product is completely ozone-safe, has a low global warming impact and is 100% VOC-exempt. Importantly, it also is Trigger Grip™ compatible which generally doubles the life of the aerosol can, by eliminating wasteful overspray. Easy to handle and safe to use, Contact Cleaner C is a superior choice.



#### **Technical Details**

Chemical Family	HFC Solvent Azeotrope
Appearance	Clear, Colorless Liquid
Aroma	Slight, Ethereal
Boiling Point	44°C / 111°F

#### **Solvency & Cleaning Data**

Solvency & Oleaning Data	
Cleaning Strength (K <sub>b</sub> )	18
Specific Gravity (@ 25°C)	1.49
Percent Volatile	100%
Surface Tension (dynes/cm)	17.0
Viscosity (cps)	0.63
Evaporation (Ether = 1)	>1

#### **Health, Safety & Environmental Data**

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Toxicity Rating (ppm,	8-Hr. TWA, AEL)	See MSDS
Flashpoint (TCC)		None
Safety Rating		Nonflammable
NFPA	Health: 1; Fire: (	0; Reactivity: 1
Ozone Impact		Zero
Organic Content* (g/L	)	0
RoHS and WEEE Con	npliant	Yes
SNAP Approved		Yes

\* Includes only non-exempt VOC ingredients.

**Packaging** 

 TravelSAFE™ mini-pump 3 oz. / 85 g
 MCC-CCCS

 Aerosol
 10 oz. / 300 g
 MCC-CCC

 Minipail
 10 lbs. / 4.54 k
 MCC-CCC

 Pail
 50 lbs. / 22.7 k
 MCC-CCCP

 Drum
 550 lbs. / 249.5 k
 MCC-CCCD

All aerosols and mini-pump cans are packaged in cases of twelve (12) cans per box. All these packages have an unlimited shelf life.

#### **Related Products**

MicroCare strongly recommends the Trigger Grip™ dispenser, #MCC-ESD, with our aerosol cleaners because it speeds cleaning and reduces solvent waste. For general degreasing in dip tanks, the nonflammable *BGA Stencil Cleaner* is a more cost-effective choice.

#### **Product Notes**

AVAILABILITY. This product is available from MicroCare distributors world-wide. Contact your local distributor at <a href="https://www.MicroCare.com">www.MicroCare.com</a> for details.

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## MicroCare Corporation

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