

## Technical Specification

# ProClean™ EU Formulation!New

## Sophisticated Cleaning from Reliable Chemistries

### Enhanced with the World's Newest, Environmentally-Progressive Propellant



*ProClean™ and the money-saving Trigger Grip deliver high-quality, plastic-safe cleaning and easy handling with superior environmental characteristics*

- More Powerful than Ordinary Alcohol
- Superior Results on Fluxes & Pastes
- Versatile: a Defluxer, a Stencil Cleaner and Degreaser All in One
- REACH and ELINCS Pre-Registered
- Complies with F-Gas Regulations
- Familiar Handling and Aroma

#### General Information

ProClean™ EU is a mild circuit cleaner made from a unique blend of pure alcohols. Available only in Europe, ProClean EU is a special blend of this best-seller that uses a new propellant for reduced global warming impact.

#### About the Product

ProClean™ EU is a mixture of three ultra-pure alcohols, double-filtered and containing less than 1% water. This means ProClean delivers much stronger cleaning than other alcohol-based solvents. ProClean easily dissolves flux residues, pastes, organics, light oils and some inks. Because it dries more slowly than other MicroCare cleaners, it also is suitable for cleaning stencils and light degreasing. While it works well on rosin fluxes, synthetic fluxes and most "no-cleans" it may not be strong enough for reflowed lead-free materials.

Non-corrosive and ESD-safe, the cleaner is compatible with all materials and substrates and is safe on PCBs, hybrids, connectors, components, boards, displays, cables and stencils. ProClean is a recommended for cleaning all types of electronics, components and assemblies. Rinsing is never required.

This is one of the first electronics cleaners to feature tetrafluoropropene as the propellant (see "Packaging" notes). By switching to this HFO propellant, ProClean EU helps companies meet the new EU rules to minimize global warming (the "F-Gas rules").

ProClean EU is affordably priced and is Trigger Grip™ compatible for maximum economy. Now linked with a low GWP propellant, ProClean EU is a planet-friendly choice for today's advanced circuit boards.



#### Technical Details

Chemical Family	Traditional Alcohols with New HFO Propellant
Appearance	Clear Colorless Liquid
Aroma	Characteristic Alcohol
Boiling Point	77°C / 173°F

#### Solvency & Cleaning Data

Cleaning Strength (K <sub>b</sub> )	45 (est)
Specific Gravity (@ 25°C)	0.79
Surface Tension (dynes/cm)	23
Percent Volatile	100%
Vapor Density (Air=1)	1.82
Evaporation Rate (Ether = 1)	<1
Water Content	<400 ppm

#### Health, Safety & Environmental Data

Toxicity Rating (ppm, 8-Hr. TWA, PEL)	See MSDS
Flashpoint (TCC)	12°C / 53°F
Safety Rating	Flammable
NFPA Ratings	Health: 1; Fire: 3; Reactivity: 1
Ozone Impact	Zero
Non-Exempt Organic Content (g/L)	785
REACH & ELINCS Pre-Registered (See MSDS)	Yes
RoHS and WEEE Compliant	Yes
F-Gas Compliant	Yes

#### Packaging

Aerosol (Europe only)	12 oz./340 g	MCC-PRO127
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-PROG
Drum	355 lbs./161.4 k	MCC-PROD

*Also available with the older HFC propellant:*

Aerosol (Europe only)	12 oz./340 g	MCC-PRO101
Aerosol with Brush	12 oz./340 g	MCC-PRO126

The aerosols are packaged twelve (12) cans per box. Unlimited shelf life. The propellant in #MCC-PRO127 is one of the first F-gas compliant products, HFO tetrafluoropropene (CAS #1645-83-6; ELINCS #471-480-0). Tetrafluoropropene is a drop-in replacement for HFC-134a (industry's standard propellant). It has a global warming impact of six, as opposed to 1,400 for HFC-134a, and an atmospheric life of only two weeks, unlike 14 years for HFC-134a. The tetrafluoropropene formulation is protected under patent-pending status in the U.S.

#### Product Notes

**AVAILABILITY.** This product is available from MicroCare distributors worldwide. Contact your local distributor at [www.MicroCare.com](http://www.MicroCare.com) for details.

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