

MicroCare™



**Contamination Control:
Precision Cleaning – Removing production
contaminates down to the sub-micron level with
CoSolvent Vapor Degreasing.**

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Cleaning Method – Vapor Degreasing

- **Vapor Degreasing:**
A simple and Low Cost method of Cleaning production quantity parts to a high quality standard
- The equipment design has been around since the 1940's.
- Halogenated solvents (F- and or Cl-)
 - Hostile to pathogens/ does not add to bioburden
 - Solvents with low surface tension, low viscosity and good solvency strength
 - Allows for submicron filtration
 - 100% Volatile
 - Parts come out clean, dry and ready for use or package



Solvents

- **Mono-Solvents**
- **Azeotropes**
- **Co-solvents**



Co-Solvents

- A solvating agent and a rinse agent
 - Unique attributes (Cl- free)
 - Designed solvency
 - No-Clean Fluxes
 - Other synthetics

Possibly reduced toxicity

Possibly reduced Flam.





Cleaning - Submicron

- **Cleaning is a process**
 - **Equipment**
 - **Through-put**
 - **Chemistry**
 - **Environment**
 - **White room**





Equipment

Designed for sub-micron cleaning

- **Sized right**
- **Energy addition**
 - **Removal**
- **Workload / throughput**
- **Compatible with cleaners**
 - **Filters, pumps, separators**





Throughput / time

Throughput

- Lab
 - Solvent and process qualification
- Production verification
- Controlled by automation
- repeatable





Chemistry

Co-solvents:

Solvating agent (New Gen)

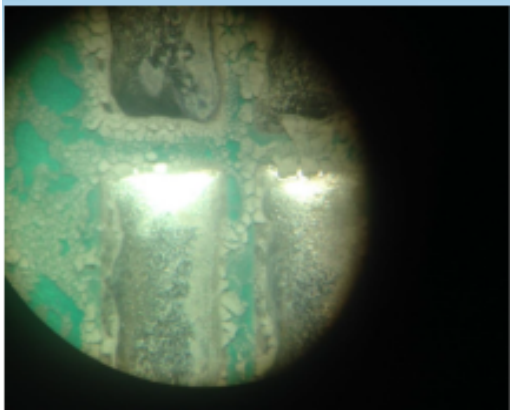
=Rinse agent + additive.

- stays in the boil sump.**
- formulated to remove soils**
- compatible**

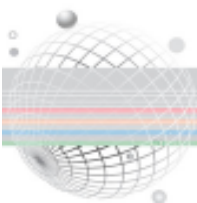
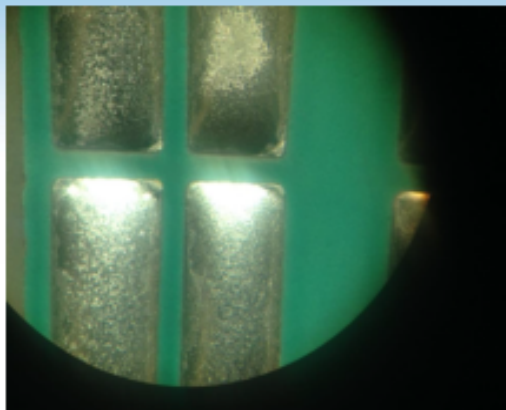


Chemistry

Std Solvent



HPFR



MicroCare®





Chemistry

Co-solvents:

Rinse Agent

- volatilizes
- vapor and rinse
- no residues





Co-solvents:

Rinse agent is a component of the Solvating agent

- make up solvent for both sumps.
- easy to maintain
- long bath life: boil sump
- no added bioburden





Chemistry

Co-Solvents:

- Chlorine Free Cleaning Fluid
- High Performance Flux Remover
- Synthetic Grease Cleaner

Hybrids:





Thank you

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