Contrad 70 is an emulsion of anionic and nonionic surfactants in an alkaline aqueous base. It removes virtually any contaminant from every surface – even silicones, dried proteins, carbon, most resins, waxes, and oils. Contrad 70 works by soaking, scrubbing, or in ultrasonic cleaning baths.

Contrad 70 is totally rinsable eliminating detergent build-up that interferes with analysis, tissue culture, and other critical procedures.

Contrad 70 is extremely effective when used as an ambient soak solution – no need to scrub! Its activity can be accelerated by heating, agitation, and ultrasonics, or by increasing concentrations.

Contrad 70 is phosphate-free, chlorine-free, and biodegradable. Used solutions may be disposed straight to drain providing they have not been used to remove contaminants that are in themselves pollutants.

- TYPICAL APPLICATIONS -

- Evaluate Contrad 70 on every problematic cleaning application!

- Soak all labware – glass, plastics, ceramics, and most metals. Solutions are alkaline, so avoid non-ferrous metals, such as aluminum, zinc, and copper.

- Superb ultrasonic cleaner
- Pipet soaking
- Cuvets
- Culture bottles
- Flashpoint test sample cups
- Production mixers, fillers, storage containers
- Radioactive decontamination
- Sample vials for HPLC
- Pharmaceuticals and Biotechnology plant/equipment
- BOD bottles in waste-water labs
- Label remover-soak sample bottles
- Machined parts and components
- Stills, pilot plant, reactor vessel, fermenters.
- Replaces chromic acid, solvents, caustics
- Silicones and Hydrocarbons
- Small and awkward flasks- no scrubbing
- Stills, pilot plant, reactor vessel, fermenters.
- Surface prep before coating operations

- WORKING SOLUTIONS –

Make up your Contrad 70 working solutions in deionized or distilled water for best results. Hard tap water will precipitate hardness salts.

2-5% Most routine labware soaking pipettes, cuvets, flasks, etc.

5-10% Tissue culture plates, pilot plant, radioactive decontamination, ultrasonic tank use, fermenters.

10-20% Carbonized materials, grease and oils, high levels of radioactivity, “stubborn” contaminants.

20%+ Silicone greases, polymers, distillation residues, “impossible” contaminants.

Soak 2-12 hours, longer for stubborn contamination. Rinse while still wet in deionized or distilled water.

- RINSABILITY –
Contrad 70 is totally rinsable – however, numerous factors affect rinsability. These factors include temperature, and volume of water, nature of surface, shape and size of the vessel.

**THE RINSE PROCEDURE IS AS IMPORTANT AS THE WASH PROCEDURE IN ALL LAB TECHNIQUES!**

**CAP Certification.** Contrad 70 is a complex cleaning agent that contains non-ionic detergents. Any rinsability test applicable to a non-ionic detergent will be effective in checking for the correct and total rinsing of an article that has been cleaned in Contrad 70 solutions.

Chemetrics Labs offer a detergent residue test kit, Route 28, Calverton, VA 22016. (800) 356-3072. Catalog #K-9400.

The phosphate-free nature of Contrad 70, its inherent rinsability characteristics and broad-spectrum cleaning capability are advantages that make it suitable for all critical laboratory cleaning applications.

**We therefore consider Contrad 70 cleaning agent ideal for use in any laboratory subject to CAP Certification.**

**pH.** The rinse water or water lying on the surface of a rinsed vessel can be checked for pH. Assume deionized water with a pH of 6 is used for rinsing. A similar pH reading on the surface residual water will indicate that all detergent has been rinsed away. Since Contrad 70 is alkaline, a higher pH may indicate residual detergent – continue to rinse.

**Conductivity.** The presence of any detergents in rinse water will increase its conductivity. Monitor the deionized water before rinsing and after. When the conductivity readings coincide, total rinsability has been achieved.

**Total Organic Carbon.** TOC in Contrad 70 concentrate is 3.36 % by weight. A TOC analysis may be used to determine rinsed state of a surface cleaned in Contrad 70.

Due to the stability of the product there is no expiration date. If an expiration date is needed, two years after the manufacturing date is recommended, however using the product beyond the suggested two year span should not affect its efficacy. The manufacturing date can be found on the lot specific certificate of analysis. Store at 5°C to 25°C. Do not freeze.

Diluted solutions in open cleaning tanks are affected by various conditions, such as the soiling removed from labware, dust, biological contamination, and CO₂ absorption. Replace cleaning solution after pH drops below 9, or there is a visible deterioration in cleaning ability. Specific experience may alter this, for instance, the presence of media and cultures, the washing acidic contaminants, and oil and grease removal, will make for a shorter usable life.

To ensure high activity levels and total rinsability, mix fresh solutions frequently!

- **PACKAGING -**

  1 Liter (34 oz.) / 12 per case  
  5 Liters (1.32 Gal.) / 4 per case  
  20 Liters (5.28 Gal.) / each  
  210 Liters (55 Gal.) / each

- **CATALOG NUMBERS-**

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<th>Manufacturer</th>
<th>Item</th>
<th>Cat. No.</th>
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For Additional Technical Information call  
Decon Customer Service  
(800) 332-6647, or  
See our website at www.deconlabs.com