



Radioactivity cleaning solutions: COUNT-OFF

COUNT-OFF™ is an all-purpose liquid cleaner formulated specifically for decontaminating surfaces exposed to radioactive isotopes. It is commonly used in research labs, hospitals, and nuclear facilities where radiolabeled materials such as ^3H (tritium), ^{14}C (carbon-14), ^{32}P (phosphorus-32), and ^{35}S (sulfur-35) are handled.

COUNT-OFF is a fast, effective, all-purpose decontaminant available both as a concentrated solution and a convenient ready-to-use spray with benefits such as:

- >95% decontaminating efficiency
- None of the toxic vapors associated with chromic acid
- Non-reactive emulsifiers
- Efficient substrate removal



COUNT-OFF liquid concentrate

COUNT-OFF liquid concentrate cleans up even the most persistent left-overs:

- Radioactive residues
- Stopcock and vacuum greases
- Lanolin
- Petroleum jelly
- Dried blood and serum
- Fatty and amino acids
- Protein complexes
- Polymer films and other stubborn residues

Safe and stable

COUNT-OFF is safe and stable under extreme temperature fluctuations (from -50°C to 150°C). At 2% concentration, the COUNT-OFF solution is a mild reagent with alkalinity equivalent to a 10⁻² molar sodium hydroxide solution. Moreover, COUNT-OFF solutions will not produce toxic gases from substrates containing ¹⁴C, ¹³¹I, ³⁵S or ³⁶Cl, known to be produced by strong acidic cleaners such as chromic acid.



Caution: As with all slightly alkaline cleaning solutions, COUNT-OFF, diluted for normal use, can attack amphoteric metals such as aluminum and zinc. These surfaces should either be cleaned with utmost care to avoid possible etching or cleaned with a different milder surfactant system such as COUNT-OFF spray surface cleaner

Directions for use

For most applications, COUNT-OFF liquid concentrate should be diluted to 1:49 (COUNT-OFF : warm water). Tests show that residual ¹⁴C, ³H, and ³²P activity on glassware is typically reduced to 0.3% or less of its original level following a 24-hour room temperature soak in 2% COUNT-OFF and rinsing. More stubborn substances, for example, those containing ⁵⁹Fe and ¹³¹I, respond to soaking in a 5% COUNT-OFF concentration for two hours at 50°C. Faster decontamination can be achieved by simply increasing the COUNT-OFF concentration and/or raising the solution temperature. Ultrasonic or manual agitation will greatly accelerate the decontamination process.

COUNT-OFF aerosol spray surface cleaner

Safety essential in the lab:

- Foam traps and confines spills, preventing spreading of contamination
- Ideal for hard-to-reach corners
- Non-corrosive, safe for all laboratory surfaces

General information

COUNT-OFF spray surface cleaner makes quick work of decontaminating small radioactive spills. Foaming action traps and suspends radioactive particles for easy wiping away, making cleanup easy and reducing the likelihood of contamination to hands and clothing. COUNT-OFF spray will effectively remove both ionic and non-polar radioactivity as well as stubborn substances like grease, resins, blood, and wax – even from rough surfaces.

COUNT-OFF aerosol spray surface cleaner is perfect for small or difficult-to-reach spots like instrument housings, hood corners, centrifuge cups and heads, and LSC counter mechanisms. It is equally useful in routine decontamination of exposed laboratory surfaces, including benches, shields, and appliances. Non-corrosive COUNT-OFF surface cleaner can be used with confidence on glass, metal, wood, painted and plastic laboratory and instrumentation surfaces.

Ordering information

COUNT-OFF liquid concentrate (store ambient) **COUNT-OFF aerosol spray surface cleaner** (store ambient)

Part number	Description
6NE9422	1 x 2.5L
6NE9427	4 x 2.5L

Part number	Description
6NE942T	6 x 650 mL spray bottles