

# aero concentrated deodorants

Our line of AERO Liquid Odor Control Products contains ready-to-use and concentrated deodorants ranging in application from room air deodorizing to municipal odor control.

## HIGHLIGHTS

- HIGHLY CONCENTRATED DILUTE UP TO ½ OUNCE PER GALLON!
- CONTAINS MALODOR COUNTERACTANTS
- ELIMINATES FOUL ORGANIC ODORS

## APPLICATIONS

- SCHOOLS
- HOTELS/MOTELS
- RESTAURANTS
- HOSPITALS
- OFFICE BUILDINGS
- BUS STATIONS
- AIRPORTS
- NURSING HOMES

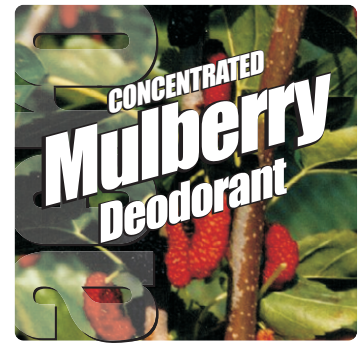
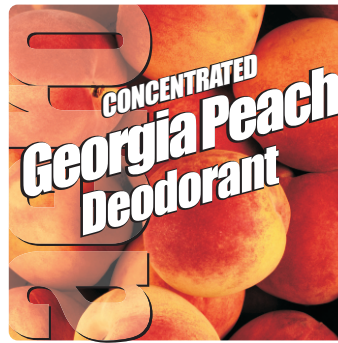
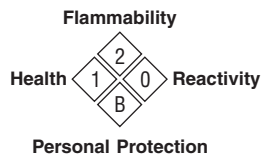
## TYPICAL PROPERTIES

- Specific Gravity: 1.0
- pH: 7-9

## SAFETY CAUTIONS

- Keep out of reach of children.
- Eye and skin irritant. Ingestion may cause nausea, vomiting, and diarrhea.
- Refer to M.S.D.S. and product label for additional safety information.

## HMIS RATINGS



Concentrated GEORGIA PEACH (6580)  
 Concentrated MULBERRY (6578)  
 Concentrated FRESH-N-CLEAN (6579)

Formulated with a unique malodor counteractant which eliminates foul organic odor from carpets, floors, dirty laundry, curtains, kennels, garbage compactors, etc.

### -EFFECTIVE AGAINST ODORS CAUSED BY-

- Urine • Fire Damage • Mold and Mildew
- Feces • Smoke Damage • Cooking
- Stale Smoke/Beverages • Vomit • Pets

### -CONTROLS ODORS IN-

- Air Conditioning Systems • Restrooms • Closets
- Waste Containers • Automobiles • Elevators
- Reception Rooms • Closets • Lobbies

**DIRECTIONS-** DILUTE UP TO ½ OZ PER GALLON. Spray directly on or around odor.

**To Refresh Air:** Spray towards center of room whenever odors occur. **Hospitals/Nursing Homes:** Spray directly on bed pans, urinals, dirty bed linens and used bandage collection areas. **Motels/Hotels:** Spray around each bed, carpet corners, toilets and in corners of main lobby.

Distributed by:

**aero**  
 CHEMICAL COMPANY

a division of: ABC Compounding Co., Inc. Atlanta, GA / Dallas, TX



# aero

Deodorants & Air Fresheners

## EVALUATION OF EFFECTIVENESS

Air fresheners have been prominent in our industry for decades with virtually no fundamental improvements for many years.

Most products claim to mask the odor with a fragrance and destroy the source of the odor with a malodor counteractant. Some common malodor counteractants include Metazine (*mostly used in aerosols*), quats (*used in water based liquid formulations*) and bacteria/enzyme complexes. Metazine chemically modifies the malodor, quats inhibit the process that generates malodors, and biological products digest the organic source of the odor. Common application methods include aerosol air fresheners (*aerosols generate particles small enough for proper dispersion and adequate contact with the malodor molecules*), and liquid deodorants dispensed through a trigger sprayer and usually applied directly to the source such as trash cans, dumpsters, etc.

And then, along came *Febreze*; a new malodor counteractant designed to deodorize “soft” surfaces that “trap” the malodor, such as furniture, drapes, carpets, etc. *Febreze's* success spawned many “copy cats” claiming to be equal or better. At ABC our research team set out to determine if these new products were indeed better than the quats that had been used in liquid deodorants for years.

First we needed to determine what were these new malodor counteractant chemicals. There were several: Zinc Ricinoleate (ZR), Zinc Acetate (ZA), and Cyclodextrine (*the active ingredient in Febreze*); all claiming to “encapsulate” the malodor molecules.

Once the ingredients were determined we compared the deodorizing ability of these ingredients to a “blank” (*no active ingredient at all*). All contained the same level of the same perfume. These samples were tested against 4 malodors:

- Cigarette smoke
- Amyl mercaptan (*sulfur odor-rotten eggs*)
- Butyric acid (*body odor*)
- Trimethylamine (*fish, urine, ammonia*)

These malodors were sprayed onto fabric, air dried, placed in jars, then sprayed with the deodorant and the jars closed. The fabric was evaluated by smelling immediately after spraying, 1 hour later, and 24 hours later.

**Results:** the “blank” with no active ingredient performed equally to those with the active ingredients.

We then repeated the test using the same samples, however, no masking perfume was added to any sample.

**Results:** the samples with active ingredients out performed the “blank”.

**Explanation:** The active ingredients such as those in *Febreze* react not only with the malodor but also with the good odors, i.e: perfumes.

**Conclusion:** It seems that the benefit of having a perfume overrides the benefit of reducing the malodor in perfumed formulations.

**Our decision:** Incorporate a quat based malodor counteractant with our deodorants and air fresheners as quats do not react with odors (*good or bad*) but rather inhibit the generation of malodors while allowing the perfume to perform its function.

