

Rationale For Citressence™

Natural Odor Protection

A unique blend of botanical extracts and natural essential oils, Citressence effectively and safely neutralizes offensive odors without relying on overpowering synthetic masking agents, smothering perfumes, or potentially hazardous bacteria or enzymes. Citressence is a liquid odor counteractant available in two versatile product forms: pump spray air refresher and all-purpose pet spray. Natural odor-fighting ingredients work with a natural, mild, pure citrus scent leaving a convincing “fresh air” feeling of clean. With Citressence, common natural odors such as food spoilage odors, body odors, and odors of animals and animal wastes can be quickly neutralized and eliminated through natural chemistry.

CITRESSENCE™

W Y S O N G

CITRESSENCE™

This odor counteractant is a botanical and citrus formulation containing safe natural extracts that have the capability of neutralizing – not just masking – most offensive odors. Imparts initial light citrus scent, then no scent at all (including the bad ones). Highly concentrated, very economical and extremely safe and efficient.

INGREDIENTS: Natural Botanical Extracts, Essential Oils.



Odor Perception

Despite the important influence of the sense of smell on our daily lives, we know surprisingly little about it. One thing that is known with certainty, however, is that the sense of smell is a chemical sense. For an odor to be detected, air must be drawn upwards through the nostrils so that airborne odor molecules make contact with the olfactory epithelium, where approximately 100 million olfactory nerve cell fibers bearing hairlike cilia are embedded beneath a dense film of mucus that coats the inner surface of the nasal cavity. Odor molecules bind chemically to protein receptors located on the ciliary projections of olfactory cells. An enzyme residing at the receptor site reacts with the odor stimulant. This reaction conceivably could set up the receptor potential in the olfactory nerve endings which results in the generation of sensory impulses. These signals are rapidly transmitted via the olfactory nerve fibers to the higher brain centers where the signals are integrated and interpreted in terms of the character and intensity of the odor.

Odor Specificity

The mechanism by which the brain perceives and recognizes odors is dependent upon the ability of different receptors to respond selectively to different types of olfactory stimulants. How this is accomplished has yet to be scientifically established. However, one of the fundamental theories of olfaction which has gained substantial credibility is the chemical theory of olfaction. This theory assumes that different types of receptor chemicals, or enzymes, in the membranes of the olfactory cilia will determine the type of odor stimulant that will excite the olfactory cell. Signal generation then, appears to begin at the receptor site as a result of a specialized reaction between a specific odor and a specific resident chemical substance.

Conventional Odor Control

The majority of conventional deodorizers and air fresheners are designed to act by flooding the sensitive olfactory membranes with a large number of molecules, creating a strong odor stimulus that in effect masks the malodor. The onslaught of synthetic perfumes inevitably sets off a tidal rush of signals to the brain which dwarfs the impact registered by the undesirable odor. While covering odors with stronger smelling chemicals can provide relief from unpleasant olfactory reminders, this relief is strictly transitory since stubborn odors often remain long after the heavily scented effects of masking agents have vanished. Other product claims implying that malodor molecules are somehow “destroyed” or “chemically neutralized” and simply fall to the ground before reaching the nose are unsupported in fact.

Safety

Myriads of chemicals are used in sprays, aerosols, solutions, etc. to achieve pervasive pleasant odors. Safety, however, is not usually the primary consideration. Instead, marketability takes precedence. Preservatives, propellents, solvents, emulsifiers, dyes, etc. are used with impunity. Various toxicological tests may be made on animals but cross species applicability, prolonged exposure, synergetic properties, and biochemical individuality are impossible to assess. The health of our environment at large is suffering at the hands of commercial insensitivity. The consumer must increasingly make serious choices when purchasing such products if the general issue of health is to be fully considered.

Citressence and Odor Counteraction

Rather than resort to the use of overpowering synthetic masking agents or other noxious chemicals, Citressence

employs organic odor deactivators which effectively reduce or eliminate the perception of undesirable odors caused by, for example, small chain carboxylic acids (the primary odorous components in perspiration), amines (many of which produce fishy odors), and mercaptans (foul-smelling compounds reminiscent of rotten eggs). Odor deactivation is achieved by virtue of Citressence's unique ability to occupy receptor sites and horde the supply of resident enzymes which would ordinarily react with the malodor(s). Because volatile Citressence molecules can consume receptor enzymes at a much faster rate than the malodors, the unpleasant odor is not perceived. This competitive use of receptor sites and enzymes may result in a disproportionate generation of modified signals other than those characteristic of the malodor. Because the pattern of these signals is slightly different, the brain may instead perceive either the absence of odor or a mildly pleasant but faint natural citrus fragrance.

Applications

The following two different formulations of versatile Citressence natural odor counteractants are intended for general household or institutional use on problem odors wherever they may occur: restrooms, locker rooms, waste and garbage areas, kitchens, storage areas, basements, conference rooms, offices, living areas, automobiles, veterinary environments, boarding facilities, etc. In all cases, Citressence should be used at levels which effectively remove unwanted odors but not at levels high enough to strongly detect the natural citrus fragrance of the product itself.

Air Refresher/Surface Deodorant:

Packaged in a 16 oz. non-aerosol spray pump, this Citressence formula should be sprayed upwards toward the center

of a room (spray 20 seconds per 2000 cu.-ft.) to neutralize lingering airborne odors and to enliven stale, dead air with a hint of a natural citrus scent. To treat difficult surface odors, spray directly on any water-safe surface.

Multi-Purpose Pet Spray: Packaged in a 16 oz. non-aerosol pump sprayer, this product neutralizes stubborn odors that are intimately associated with pets. This particular Citressence formulation is exclusively designed for safe, direct use on companion animals. For use on pets, spray Citressence Multi-Purpose Pet Spray directly on the animal avoiding eyes, and work into coat. There is no need to dilute or rinse product from coat once an application has been made. In addition to being safe to use on pets, this formula is also safe for use on any water-safe surface where animal odors reside (animal bedding, carpet, cages, upholstery, etc.). This formula is designed to be especially effective on skunk, ferret, premise, urine, feces, and other animal odors.

Cautions: Although Citressence is a natural product made from natural essential oils and botanical extracts, its concentrated form requires careful, mature usage regardless of which Citressence formula is being used. Always keep Citressence odor counteractants in a safe location out of the reach of young children. If swallowed, promptly consult a physician. Citressence is for external use only. Avoid contact with skin and eyes.

Citressence is intended not to substitute for other healthful indoor environmental measures, but to complement them. Good hygienic practices, scrupulous regular cleaning, regularly flushing interiors with fresh outside air (be alert to community pollutants fouling your air and demand cessation), careful surveillance of

the toxicity of various construction materials (which could include woods, glues, paints, and fabrics), proper air filtration and conditioning, and the use of full spectrum indoor lighting, should all be diligently given consideration in designing and maintaining a healthful interior environment.

Contact Wysong for further suggestions, literature, and product sources for interior environmental health at our website: www.wysong.net.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

CITRESSENCE™ SCIENTIFIC REFERENCES

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