Specimen Memo — Fragrance Use

Our firm is concerned about an issue that is very important to the health of some of our staff. We hope by providing you with comprehensive information, you will be better able to provide a safe working environment for all employees.

A growing number of people have a sensitivity or allergic reaction to the chemicals used in fragrances. The symptoms of an allergic reaction can range from a minor skin rash, sinus irritation and burning eyes to migraine headaches, cough and even severe asthmatic episodes. Those chemicals can be found in perfume, cologne, after-shave, potpourri, candles, lotions, hair products, cleansers, etc. The list of products is almost endless.

On behalf of staff members who have experienced adverse reactions, we request your cooperation in minimizing this health issue. Please consider not using fragrances when you come to the office, or try to use them sparingly. Also, please keep in mind that the scents in candles, flowers, potpourri, etc. can be just as potent as personal fragrances.

The following article lists some of the scent allergens found in a lot of common products and what reactions might occur as a consequence of exposure. The information is pertinent to any work setting, but should particularly be heeded when in a closed environment such as our office.

FRAGRANCE SENSITIVITY

Discover Why Fragrances Can Be Harmful

What Makes Up Fragrances?

Ninety-five percent of the chemicals used in fragrances are petroleum-based synthetic compounds. Listed here are some principal chemicals found in scented products and the health risks that can be involved, according to one or more hazardous waste lists.

**Acetone** can be found in cologne, dishwashing liquid and detergent, and nail enamel remover. When inhaled, it can cause mild central nervous system disturbances such as dizziness, nausea, incoordination, slurred speech, and drowsiness. It can irritate the eyes, nose, throat, and skin.
**alpha-Pinene** is used in bar and liquid soap, cologne, perfume, shaving cream, deodorant, dishwashing liquid, and air freshener. It can be a moderate irritant to skin, eyes, and mucous membranes.

**alpha-Terpineol** is used in perfume, cologne, laundry detergent, bleach powder, liquid bleach, fabric softener, stick air freshener, Vaseline lotion, cologne, soap, hair spray, after shave, and roll-on deodorant.

**Benzyl Acetate** can be found in perfume, cologne, shampoo, fabric softener, stick air freshener, dishwashing liquid and detergent, soap, hair spray, bleach, aftershave, and deodorant. The vapors from this chemical can be irritating to the skin, eyes and respiratory passages.

**Benzyl Alcohol** can be found in perfume, cologne, soap, shampoo, nail enamel remover, air freshener, laundry bleach and detergent, Vaseline lotion, deodorant, and fabric softener. It can be irritating to the upper respiratory tract, skin, eyes, and mucous membranes. It can cause headache, nausea, vomiting, dizziness, and drops in blood pressure.

**Benzaldehyde** can be found in perfume, cologne, hair spray, laundry bleach, deodorant, detergent, Vaseline lotion, shaving cream, shampoo, bar soap, and dishwasher detergent. It may cause irritation to the mouth, throat, eyes, skin, lungs, and GI tract. It may also cause nausea, abdominal pain, depression and contact dermatitis.

**Camphor** can be found in perfume, shaving cream, nail enamel, fabric softener, dishwasher detergent, nail color, and stick air freshener. Since it is readily absorbed through body tissues, it can irritate the eyes, nose, and throat. It is recommended to avoid inhalation of the vapors because it can cause dizziness, confusion, nausea, twitching muscles, and convulsions.

**Ethanol** is used in perfume, hair spray, shampoo, fabric softener, dishwashing liquid and detergent, laundry detergent, shaving cream, soap, Vaseline lotion, air fresheners, nail color and remover, and paint and varnish remover. One of its symptoms can be fatigue and it can irritate the eyes and upper respiratory tract. It can also cause a central nervous system disorder.

**Ethyl Acetate** is often found in aftershave, cologne, perfume, shampoo, nail color, nail enamel remover, fabric softener, and dishwashing liquid. It can cause irritation of the eyes, mucous membranes, gums, and respiratory tract. Repeated or prolonged contact can cause drying and cracking of the skin.
**g-Terpinene** can be found in cologne, perfume, soap, shaving cream, deodorant, and air freshener. It can cause asthma and central nervous system disorders.

**Limonene** is used in perfume, cologne, disinfectant spray, bar soap, shaving cream, deodorant, nail color and remover, fabric softener, dishwashing liquid, air fresheners, aftershave, bleach, paint, and varnish remover. Its vapor can irritate the eyes, mucous membranes, and upper respiratory tract. It also can cause an allergic skin reaction.

**Linalool** can be found in perfume, cologne, bar soap, shampoo, hand lotion, nail enamel remover, hair spray, laundry detergent, dishwashing liquid, Vaseline lotion, air fresheners, bleach powder, fabric softener, shaving cream, aftershave, and solid deodorant. It can attract bees, so if you are allergic to bee stings, stay away from products that contain it. The most abundant chemical in perfume and fragrance products, it is known to cause lethargy, depression, and life threatening respiratory effects.

**Testing & Research**

Most fragrance chemicals are not tested for safety. The tests that have been conducted are those relating to skin sensitivities. Very little testing has been done on the respiratory effects of fragrance materials even though most are volatile organic compounds and respiratory exposure is significant.

If fragrance chemicals affect your health, the Health & Environment Resource Center recommends reporting adverse reactions to the Food and Drug Administration (FDA).

**Beware of the Terms Fragrance Free and Unscented**

A growing number of people have found that exposure to certain fragrances, including perfumes and scented products, adversely impacts their health.

More than 5,000 different fragrances are in products that are used on a daily basis. These products include health and beauty aids, household cleaners, laundry aids, drugs, paper products, plastics, industrial greases, oils and solvents, and even foods.

Since fragrance formulas are considered trade secrets, manufacturers only have to print "fragrance" on the label and do not need to identify the chemical makeup.
How Fragrances Can Affect the Body

Fragrances can enter the body through the nose by inhalation, the mouth by ingestion, or the skin by absorption. Fragrance chemicals can affect the lungs, nose, skin, eyes, and brain.

Studies have shown that shortness of breath or asthma-like symptoms have been caused by fragrances.

Being a chemical receptor, the nose can also be affected with sneezing and sinus problems.

Studies have shown that inhaling fragrances can also cause circulatory changes and electrical activity in the brain. These changes can trigger migraine headaches, the inability to concentrate, dizziness, and fatigue.

The number one cause of adverse skin reactions to cosmetics and laundry products is fragrance. The skin reactions to fragrance chemicals can produce rashes, hives, dermatitis, or eczema.

Other symptoms can include watery eyes, nausea, burning in nasal passages, sore throat, cough, and chest tightness.

Some fragrance materials, studies have shown, are absorbed by the skin and then broken down into materials that are stronger sensitizers than the original chemicals.

Confusion with Terms Used

Products with labels that contain the words fragrance free or unscented do not guarantee they do not contain fragrance chemicals, they imply that they have no perceptible odor. A product labeled "unscented" may contain a masking fragrance. If fragrance is added to a product to mask or cover up the odor of other ingredients, it is not required to be put on the label.

A product must be marked "without perfume" to indicate no fragrance has been added. Even in this instance, it is best to read the label to look for plant extracts that are potential perfume sensitizers and cross-reactors.

Fragrance Skin Sensitizers

A screening agent, called fragrance mix is used to pinpoint the cause of a large percentage of skin allergies. This fragrance mix contains eight known skin sensitizers. Most fragrances contain several of these known irritants.
[Alpha]-amyl cinnamic aldehyde is found in perfumes, cosmetics, soaps, industrial products, and toothpaste.

Cinnamic alcohol is found in perfumed cosmetic products, deodorant, paper, laundry products, food flavoring, and toothpaste.

Cinnamic aldehyde, is found in toothpaste, bath oils, hair cosmetics, lipsticks, mouth washes, soaps, detergents, food flavoring, vermouths, bitters, and chewing gum. Studies have shown that cinnamic aldehyde binds with proteins in the skin to cause allergic reactions.

Eugenol is used in colognes, toilet waters, tonics, dressings, hair cosmetics, periodontal packing, dental impression material, aftershave, perfumes, hair cream, inhalants, antiseptics, and toothpaste.

Geraniol is used in perfumes, fragrance, lip salve, facial make up, and skin care products.

Hydroxycitronellal is used in perfumes and cosmetic products, fragrance, eye cream, and aftershave.

Isoeugenol, a clove scent, is used in perfumery and as fragrance in eye cosmetics and aftershaves.

Oak moss is found in perfumes, colognes, aftershaves, and scented products for men.