

Making Sense of Scents

compiled by Julia Kendall

✿ "Perfumes are increasingly used in an ever wider variety of fields, including perfumes proper, cosmetic products, hygienic products, drugs, detergents and other household products, plastics, industrial greases, oils and solvents, foods, etc. Their composition is usually complex - it involves numerous natural and synthetic sweet-smelling constituents, more than 5,000 of which are known. Perfumes may produce toxic and more often allergic respiratory disorders (asthma), as well as neurological and cutaneous disorders." from the French toxicology journal, *Ann Dermatol Vernereol*, Vol 113, ISS 1, 1986, P.31-41

✿ 84% of these ingredients have never been tested for human toxicity, or have been tested only minimally. N. Ashford, Phd and C. Miller, M.D. *Chemical Exposures: Low Levels and High Stakes* 1991, p. 61

✿ In 1986 the National Academy of Sciences targeted fragrances as one of the six categories of chemicals that should be given high priority for neurotoxicity testing. The other groups include insecticides, heavy metals, solvents, food additives and certain air pollutants. The report states that 95% of chemicals used in fragrances are synthetic compounds derived from petroleum. They include benzene derivatives, aldehydes, and many other known toxics and sensitizers - capable of causing cancer, birth defects, central nervous system disorders and allergic reactions. "Neurotoxins: At Home and the Workplace" (Report by the Committee on Science and Technology. U.S. House of Representatives, Sept, 16, 1986) [Report 99-827]

✿ A few chemicals found in fragrances known to be neurotoxic: hexachlorophene; acetyl-ethyl-tetramethyl-tetralin; zinc-pyridinethione; 2,4,dinitro-3-methyl-6-tert-butylanisole; 1-Butanol; 2-butanol; tert-Butanol; Isobutanol; t-Butyl Toluene. Neurotoxic properties of chemicals found in fragrances have caused testicular atrophy in lab animals as well as myelin disease. The myelin sheath protects the nerves and does not regenerate. (Compiled from TOXLINE database of fragrances industry and medical journals.)

✿ Multiple Sclerosis, Parkinson's, Lupus, and Alzheimer's are all neurological disorders. Dyslexia is a neurological dysfunction. Could any of these neurological dysfunctions be caused by exposure to neurotoxic chemicals? Symptoms are often identical to chemical hypersensitivity. Sudden Infant Death Syndrome (SIDS) is also a neurological dysfunction. Could fragrant fabric softeners or detergents emitting neurotoxic chemicals cause the neurological breakdown?

✿ A few chemicals found in fragrances known to cause cancer and birth defects: methylene chloride; toluene; methyl ethyl ketone; methyl isobutyl ketone; tert Butyl; sec Butyl; benzyl chloride. (Compiled by comparing a list of 120 fragrance chemicals from the EPA obtained through the Freedom of Information Act and California's Prop 65 List of Chemicals).

✿ A few chemicals found in fragrances designated as hazardous waste disposal chemicals: methylene chloride; toluene; methyl ethyl ketone; methyl isobutyl ketone; ethanol; benzal chloride. These chemicals are listed in the EPA's Code 40 of Federal Regulations, Ch 1, Section 261.33.

✿ 884 toxic substances were identified in a list (partial) of 2,983 chemicals used in the fragrance industry: "Many of these substances are capable of causing cancer, birth defects, central nervous system disorders, breathing and allergic reactions and Multiple Chemical Sensitivities." (National Institute of Occupational Safety and Health report.)

✿ In a National Institute of Occupational Safety and Health study conducted by Syracuse Research Corporation, Report No. SRC TR 81-521, 1981, benzoin is named as a chemical used in fragrances found to cause enlarged lymph nodes in both male and female mice and enlarged spleens in males. Liver damage is also cited.

✿ AMICUS journal, Winter '89, Board of Environmental Studies and Toxicology of the National Research Council, the research branch of the National Academy of Sciences estimates that "15% of the population experiences hypersensitivity to chemicals found in common household products".

✿ National Institutes of Health, "Issues and Challenges in Environmental Health," NIH Pub. #87-861... "allergic reactions and hypersensitivity diseases, for instance, are among the most costly of U.S. health problems afflicting at least 35,000,000 Americans".

✿ Article "One Woman's Perfume-Another Woman's Poison", in "Let's Live": "The chief reactions we see are those that affect the nervous system - headaches, anxiety, depression. But anything can be affected, even diet and a personal intolerance for different foods. There are two major ways in which cosmetics and their chemical constituents can affect the body. One is through direct contact. Inhalation is the other major route for molecules of an active substance to enter the blood stream. "There is a route from the nasal passage into the nervous system," says Mandell... "It is the way, for instance, that inhaled cocaine has an effect on the brain."