



To: Consumer Product
Manufacturers and
Fragrance Suppliers

Number 131

July 1996

Fragrance Exemptions

The purpose of this advisory is to clarify the sections of Title 17, California Code of Regulations, Article 2, Sections 94507-94517, Consumer Products, that cover fragrances and exemptions relating to fragrances.

DEFINITION:

Section 94508(a)(36) defines a fragrance to mean "a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of 2 mm Hg at 20° C, the sole purpose of which is to impart an odor or scent, or to counteract a malodor."

EXEMPTIONS:

Section 94510(c) exempts from the requirements of Section 94509(a) [VOC standards] fragrances up to a combined level of 2 percent by weight contained in any consumer product. This exemption applies only to fragrances that meet the criteria in the fragrance definition above.

Section 94510(d) provides an exemption from the requirements of Section 94509(a) to any VOC that has a vapor pressure of less than 0.1 mm Hg at 20° C, or consists of more than 12 carbon atoms if the vapor pressure is unknown. This exemption applies to the vapor pressures of individual compounds, not to mixtures of compounds. When the vapor pressure is known, then the number of carbon atoms is not needed.

Section 94510(f) provides an exemption from the requirements of Section 94509(a) to air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs under Section 94508 or exempted under Section 94510(d). This exemption applies only to air fresheners. If the product contains *any* non-exempt VOCs, then this exemption does not apply.

Section 94510(j) provides an exemption from the requirements of Section 94509(a) to any VOC that is a fragrance in a personal fragrance product. This exemption applies only to personal fragrance products, and to fragrances that meet the criteria in the fragrance definition above.

The following are frequently asked questions and the ARB's reply.

Q1: Is the fragrance portion of a product viewed as a separate entity and therefore totally exempt from the standards of the regulation?

A: No. Unless the individual components of a fragrance include compounds exempt from the definition of VOC, the fragrance is counted as VOC when determining compliance with the VOC standards. However, there are 4 exemptions in the regulation that fragrances (or products containing fragrances) can claim when appropriate. These exemptions are contained in Section 94510(c), (d), (f) and (j) and are discussed in more detail in the following questions and answers.

Q2. Please explain the 2% exemption for fragrances.

A: The regulation includes an exemption for fragrances up to a combined level of 2 percent by weight contained in any consumer product. This applies to the entire fragrance mixture provided it meets the definition of fragrance (Section 94508(a)(36)). As an example, if a general purpose cleaner formula contains 1.2% by weight fragrance that meets the definition of fragrance, the manufacturer does not have to count the 1.2% fragrance as a VOC. As another example, if an air freshener product contains 50% fragrance by weight, 2% of the mixture would not be counted as a VOC.

Q3: How can I claim exemption for fragrance components that have vapor pressures less than 0.1 mm Hg.

A: While not originally intended to apply to fragrances, this exemption can be applied to individual compounds contained in a fragrance mixture that are demonstrated to meet the specifications identified in Section 94510(d). Namely, the individual compound must have a vapor pressure less than 0.1 mm Hg, or if the vapor pressure is unknown, must have more than 12 carbon atoms. This exemption applies to individual chemical compounds, not the mixture of fragrance components as a whole. As an example, a manufacturer may have a fragrance mixture that meets the definition of fragrance in the regulation and is present at 5% by weight in the product formula. The manufacturer also knows that one of the components in that mixture, geraniol (vapor pressure 0.02 mm Hg) is an LVP, and represents one third of the fragrance mixture. In this case, the manufacturer would first claim the 2% exemption for fragrances, section 94510(c), leaving the remaining portion of the fragrance mixture (3% of the product formulation) subject to the VOC standard. The manufacturer could then apply the LVP exemption to the remaining one third of the fragrance mixture (3% of the product) that is geraniol. Using the LVP

exemption would then exempt another 1% of the product formulation. The entire amount of the fragrance that could be exempt is 3% of the product formulation.

Q4: Does section 94510(d) allow an exemption for mixtures of fragrances with a combined vapor pressure of <0.1 mm·Hg?

A: No. As explained in the answer to Q3, the exemption for compounds with vapor pressures less than 0.1 mm Hg applies to individual compounds, not to mixtures of compounds.

Q5: I would like to claim an exemption for compounds in a fragrance mixture that have vapor pressures less than 0.1 mm Hg, but my supplier will not reveal the individual component data to me. How can I still qualify for the exemption?

A: Not all fragrance suppliers know which compounds in their fragrance qualify for the low vapor pressure exemption. For suppliers that have this information, they may be willing to reveal to you the total percentage of compounds in the mixture that qualify for the exemption. In the event they will not reveal this information, they may give the information to ARB directly. As always, we will treat this information as confidential under the ARB confidentiality regulations. If your supplier is unwilling or unable to provide this information, you will not be able to claim this exemption.

Q6: I understand there is an exemption for air fresheners that are comprised entirely of fragrance and non-VOCs. Could you explain how this exemption is applied?

A: Section 94510(f) provides an exemption for air fresheners that are comprised entirely of fragrance and non-VOCs. If the product contains any non-exempt VOCs, then this exemption does not apply. Some examples of products that may use this exemption are fragrance candles, and fragrance-soaked cardboard substrates.

Q7: Are there special exemptions for fragrances that are used in personal fragrance products?

A: Yes. Section 94510(j) provides an exemption for any VOC that is a fragrance in a personal fragrance product. A personal fragrance product is defined in Section 94508(a)(68) and means any product which is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including cologne, perfume, aftershave, and toilet water.

If you have questions or comments regarding this advisory, please contact the Field Enforcement Manager at (916) 322-6033.

Written inquiries may be addressed to:

**James J. Morgester, Chief
Compliance Division
P.O. Box 2815
Sacramento, California 95812
E-Mail: jmorgest@arb.ca.gov**