## Formulation Tips: The Use of Premium Perfume Ingredients in Private Label Product Perfumes

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When developing private label perfume products, the primary consideration is price, yet, in recent years, this growing category has begun to demand high-quality perfumes at low cost.

The perfumer's dilemma is how to use premium (i.e. expensive) ingredients in perfumes that satisfy the consumer, yet do not cost a lot. The old standby of simply "watering down" a perfume with odourless diluents until a low cost level is met rarely works any more. The perfumer needs to use materials that have high olfactory value and help the overall acceptance of the perfume. The use of premium ingredients is often necessary to gain the prestige that private label customers insist on.

The following formula, N125-1 (Table 1) is a detergent perfume formula that illustrates how to use multiple premium ingredients to gain consumer acceptance while maintaining chemical costs below US\$9.50 per Kilo. The perfume is a green, floral, musk type.

The premium ingredients in this formula cost from US\$27-US\$150 per Kilo. The list's premium ingredients are dihydro Isojasmonate, ebanol, geranium bourbon, isocyclogeraniol, methyl cyclogeraniate, orange isolate, santrile, undecavertol and vertral. The high percentage of d-limonene, benzyl salicylate, dulceolide and hexyl cinnamic aldehyde are what keep the cost down, while the addition of the premium ingredients adds complexity and consumer acceptability to the perfume.

One very successful combination is the use of 5 percent dihydro isojasmonate with the d-limonene. This mix, in my experience, seems to increase consumer acceptance of the perfumes in which it is applied. The use of hedione in place of dihydro isojasmonate, while less expensive, does not, in my opinion, give as strong an effect in the perfume olfactory-wise and does little to bolster consumer acceptance. The orange isolate helps the d-limonene and dihydro isojasmonate

combination by minimizing its chemical scent. The combination of a touch of geranium bourbon with methyl cyclogeraniate adds a floral geranium note, while the ebanol and santrile, in combination, provide warmth and sandalwood character. Vertral and undecavertol add a rich, natural green note. Isocyclogeraniol is useful to add a floral spice (eugenol type) to the formula without the worry of discolouration that eugenol can bring to certain product formulations.

In summary, private label products are a growing business segment with unique, seemingly mutually exclusive requirements for high quality and low cost. However, through careful use of premium perfume ingredients with lower-cost materials, the perfumer can deliver both aspects to fragrances that appeal to the consumer.

Material	Amount
Benzyl salicylate	15
Cyclohexyl salicylate (Henkel)	4.6
Dihydro Isojasmonate (PFW)	5
d-Limonene	25
Dulceolide (PFW)	15
Ebanol	0.1
Forest Air #211-743 (Alpine)	5
Geranium bourbon	0.1
Geranyl nitrile	0.1
Hexyl cinnamic aldehyde	16
Hydroxy citronellal	1
Isobornyl acetate	1
Isocyclogeraniol (IFF)	1
Lavandin grosso	1
Linalool	2
Methyl cedryl ketone	1
Methyl cyclogeraniate (Firmenich)	0.2
Orange isolate (PFW)	0.5
Pheynyl ethyl alcohol	4
Santrile (PFW)	1
Undecavertol (Givaudan)	0.2
Vertral (Symrise)	0.2
Ylang oliffac (IFF)	1
Total Parts	100.0

Table 1. N125-1 Detergent fragrance

