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Stability of fragrance patch test preparations examined

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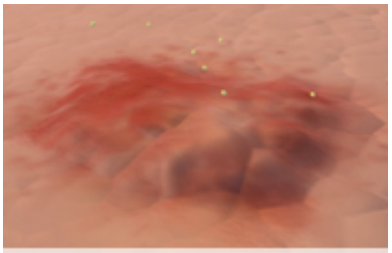

Image courtesy of Blausen Medical

Concentrations of several fragrance allergens applied to test chambers well in advance of patient testing may be reduced by 20 percent or more within hours when stored at room temperature, according to a study published online July 14 in the *British Journal of Dermatology*.

(HealthDay) -- Concentrations of several fragrance allergens applied to test chambers well in advance of patient testing may be reduced by 20 percent or more within hours when stored at room temperature, according to a study published online July 14 in the *British Journal of Dermatology*.

Martin Mowitz, of Skåne University Hospital in Malmö, Sweden, and colleagues conducted a study to determine the stability of petrolatum preparations of the seven chemically-defined components of the fragrance mix when stored in the Finn (no plastic cover) and IQ (built-in plastic cover) test chambers at room temperature and in the refrigerator.

The researchers found that, in four of the seven preparations stored in Finn test chambers at room temperature, the compound concentration decreased by ≥20 percent within just eight hours. When the preparations were stored in the refrigerator, only the cinnamal preparation decreased by ≥20 percent within 24 hours. When stored in an IQ chamber with a plastic cover, cinnamal preparation stability was slightly better; however, total concentrations decreased by ≥20 percent within four hours at room temperature and within 24 hours when stored in a refrigerator.

"Our results show that the conditions under which the fragrance test preparations are stored when applied in test chambers may affect the diagnostics of fragrance contact allergy, resulting in false negative reactions," the authors write. "Since many fragrance compounds are volatile, application to the test chamber should be performed as close in time to the patch testing as possible and storage in a refrigerator is recommended."

One author disclosed being a member of REXPAN.

More information: Abstract
Full Text (subscription or payment may be required)

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