Reveleris® X2 Flash System

Separation and Isolation of α -Santalol and β -Santalol from Sandalwood Extraction

Introduction

Sandalwood oil is an essential oil obtained from the steam distillation and or alcohol extraction of chips and billets cut from the heartwood of the Sandalwood (Santalum album) tree. Sandalwood oil is used in perfumes, cosmetics, and pharmaceuticals.

This application note shows the benefit of ELSD detection using Reveleris® X2 automated flash instrument for the separation and isolation of the two main non-chromophoric compounds, α-Santalol and β-Santalol, in Sandalwood.

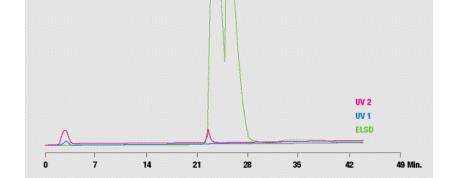
Flash Chromatography Conditions:

12 gram Reveleris™ cartridge

Flow Rate: 15mL/min

Cartridge equilibration: 4 min.

Slope detection: High ELSD Threshold: 3mV UV Threshold: 0.02AU UV1 Wavelength: 254nm UV2 Wavelength: 240nm Injection type: Liquid Solvent A: Hexane Solvent B: Ethyl Acetate



Separation of α -Santalol and β -Santalol in Sanadalwood by the Reveleris® X2 flash instrument.

Gradient: Time: | 0 | 5 | 20 | 20 | 30 | 40 | 42 **%B**: 0 0 7 10 10 30 30

Conclusion

Using the proposed procedure with the Reveleris® X2 flash instrument and Reveleris® Silica cartridge the separation and isolation of α -Santalol and β -Santalol Sandalwood extract can be easily achieved.

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W. R. Grace & Co.-Conn. 7500 Grace Drive, Columbia, MD 21044

Grace Discovery Sciences Regional Headquarters:

IN THE AMERICAS: 2051 Waukegan Road Deerfield, IL 60015-1899 Tel: 1 847 948 8600 Email: discoverysciences@grace.com Brandstraat 12 B-9160 Lokeren, Belgium Tel: +32 (0)9-340-65 65 Email: discoverysciences.EU@grace.com IN ASIA 19th Floor, K.Wah Center 1010 Huai Hai Zhong Road Shanghai, 200031 PRC Tel: 86 21 5467 4678 Email: dsbiz.asia@grace.com IN INDIA-Opposite Krishna Hospital, Paud Road Pune, 411038 India Tel: +91 20 6644 9900 Email: pune@grace.com

IN AUSTRALIA Rowville, 3178 Victoria, Australia Tel: +61 3 9237 6100 Email: discoverysciences.AU@grace.com

