

**Wijaksono, E.A., 2014, Analisis Senyawa Nitrosodipropilamin (NDPA) Pada Ikan Asin Dengan Teknik *Cone Shaped Membrane - Liquid Phase Microextraction - Gas Chromatography - Flame Ionization Detector*. Skripsi ini Dibawah Bimbingan Dra. Usreg Sri Handajani, M.Si dan Yanuardi Raharjo, S.Si, M.Sc. Departemen Kimia, Fakultas Sains dan Teknologi, Universitas Airlangga, Surabaya.**

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## ABSTRAK

Analisis senyawa karsinogenik nitrosodipropilamin dilakukan sebagai salah satu pengembangan metode ekstraksi. Analisis nitrosodipropilamin dalam sampel ikan asin melalui perlakuan dengan dan tanpa penambahan  $\text{KNO}_3$  telah dilakukan dengan teknik ekstraksi *cone shaped membrane – liquid phase microextraction* menggunakan instrumen *gas chromatography – flame ionization detector*. Hasil yang diperoleh dari optimasi parameter analitik jenis pelarut organik adalah toluena, kecepatan pengadukan optimum adalah 480 rpm, dan waktu ekstraksi optimum adalah 20 menit. Pada penelitian ini diperoleh limit deteksi sebesar 0,60 ppm, recovery sebesar 100,17%, presisi antara 0,39% sampai dengan 1,30% dan *true enrichment factor* sebesar 6677,74 kali. Konsentrasi senyawa nitrosodipropilamin dalam sampel ikan asin tanpa penambahan  $\text{KNO}_3$  tidak terdeteksi, sedangkan pada sampel ikan asin dengan penambahan  $\text{KNO}_3$  sebesar 1,07 ppm.

Kata Kunci: *cone shaped membrane, liquid phase microextraction, nitrosodipropilamin, ikan asin*

**Wijaksono, E.A., 2014, Analysis of *Nitrosodiprophylamines* (NDPA) In Salted Fish Asin With Technique Cone Shaped Membrane - Liquid Phase Microextraction - Gas Chromatography - Flame Ionization Detector. This script is under advisement of Dra. Usreg Sri Handajani, M.Si and Yanuardi Raharjo, S.Si, M.Sc. Department of Chemistry, Science and Technology Faculty, Airlangga State University, Surabaya.**

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### **ABSTRACT**

Analysis of nitrosodiprophylamines as carcinogenic compounds performed as one of the development of the extraction method. Analysis of nitrosodiprophylamines as carcinogenic compound in salted fish through treatment with and without the addition of  $\text{KNO}_3$  had occurred by cone shaped membrane – liquid phase microextraction technique using gas chromatography-flame ionization detector. The result were obtained analytical parameterers from types of organic solvents was toluena, the optimum stirring speed was 480 rpm, and the optimum extraction time was 20 minute. It was obtained in this study that the detection limit of 0,60 ppm, recovery of 100,17%, precision between 0,39% to 1,30% and true enrichment factor was 6677,74 times. The concentration of nitrosodiprophylamines in salted fish sample without the addition of  $\text{KNO}_3$  was not detected meanwhile in salted fish sample with the addition of  $\text{KNO}_3$  was 1,07 ppm.

Keywords: cone shaped membrane, liquid phase microextraction, nitrosodiprophylamines, salted fish