**Efek kerosin pada kemampuan beberapa senyawa komersial yang mengandung nitrogen sebagai inhibitor korosi dalam larutan medium korosif yang jenuh dengan CO2 dan mengandung kerosin**

**effect of kerosene on the performance of several commercial products of nitrogen-containing compounds as corrosion inhibitors of mild steel in a 3% Nacl solution saturated with CO2 gas**

**Ilim, Wasinton Simanjuntak, Dian Herasari, Mita Rilyanti dan Heri Satria**

Department of Chemistry Faculty of Mathematic and Natural Science,

Lampung University,

Jl. S. Brojonegoro No 1 Bandarlampung, 35145 Indonesia

Penulis korespondensi: Ilim

Phone: +62 81379510280; Fax: +62 721 704625, e-mail :ilim@fmipa.unila.ac.id ;

**Abstract**

This study aims to determine the effect of kerosene on the performance of several commercial products of nitrogen-containing compounds as corrosion inhibitors of mild steel in a 3% NaCl solution saturated with CO2 gas. The performance of the inhibitors was evaluated by weight loss or wheel test method. It was found that corrosion rates of mild steels without the use of inhibitors were respectively 3.35 mm years-1 in 3% NaCl solutions and 3.46 mm year-1 in 3% NaCl solution-kerosene. These values ​​indicate that in the absence of corrosion inhibitors, kerosene will increase the corrosion rate by about 3.28%. With the addition of corrosion inhibitors varying from 1 to 50 mg L-1 indicates that kerosene reduces the effectiveness of commercial corrosion inhibitors containing nitrogen varies from 15.9 to 95.4%.

*Keywords: Kerosene, nitrogen containing compound, corrosion inhibitor, CO2 corrosion*