

Produksi Bioetanol Gel dari Molase Menggunakan Pengental Karaginan (Ekstraksi Makro Alga *Eucheuma Cottonii*) (*Production Bioethanol Gel From Molasses use a thickener karaginan (Extraction Macro Algae Eucheuma Cottonii)*)

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ABSTRACT

Generally, The production of bioethanol gel can use bioethanol of material molasses by the addition of a thickener in the form of karaginan (the extraction of macro algae Eucheuma cottonii). This Research aims to understand treatment bioetanol 55 % and 65 % with a thickneker karaginan 0.75% , 1% and 1.25% to determine best treatmeant with ANOVA in the levels of trust 0.05 and 0.01 continued by test DMRT to know a difference in the treatment which is significant at the levels of trust 95 %. The Result ANOVA of long starting bioethanol gel, treatment concentration bioethanol and karaginan very had have real impact so it is with treatment interaction between them. And test DMRT obtained best treatment where the sample A2B3 by concentration of the bioetanol 65 % and karaginan 1.25 % with value parameter is viscosity 482,5 cp, Value long starting flames of burning for ± 6 minutes , the rate of burning of 0,027 grams per second , residue burning of 16,47 % and value heat engine of 28.130 joules / grams and the water boiling test (WBT) obtained long boil of water amounting to ± 17 minutes and spesific fuel consumption (SFC) 26,69 grams per liter.

Keywords : ANOVA, Bioethanol Gel, Karaginan, Concentration of Bioethanol, Concentration of Karaginan.