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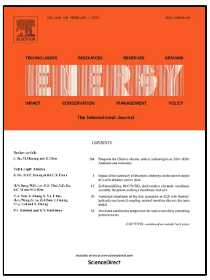

Investigation of n-butanol as fuel in a four-cylinder MPFI SI Engine

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PII:	S0360-5442(17)30317-1
DOI:	10.1016/j.energy.2017.02.134
Reference:	EGY 10427
To appear in:	*Energy*
Received Date:	09 February 2016
Revised Date:	09 February 2017
Accepted Date:	23 February 2017

Please cite this article as: Gopinath Dhamodaran, Ganapathy Sundaram Esakkimuthu, Yashwanth Kutti Pochareddy, Harish Sivasubramanian, Investigation of n-butanol as fuel in a four-cylinder MPFI SI Engine, *Energy* (2017), doi: 10.1016/j.energy.2017.02.134

- Using oxygenated compound gasoline formulations is common for improving fuel quality.
- Blends of n-butanol with unleaded gasoline were tested between 1400 rpm to 2800 rpm.
- Blends increased brake thermal efficiency and produced lower HC and CO but higher NOx.
- Lower NOx was observed when ignition timing was retarded.
- Peak in-cylinder pressures and heat release rates for blends were higher.