Biofuels from Gasification  
LPMeOH™ Technology Available for License

Air Products is making available for license a highly efficient method for producing biofuels including methanol and dimethyl ether (DME) from syngas.

For gasification system integrators who need conversion of syngas into liquid fuels, Air Products’ proprietary liquid-phase methanol (LPMeOH™) system offers both economical conversion and robust process tolerances suitable to a wide range of syngas-producing systems.

Unlike traditional syngas liquification systems, the breakthrough LPMeOH™ system can ramp up and down while providing superior conversion efficiency and heat integration. This process provides flexible methanol conversion, permitting a broad range of carbon-rich feeds.

Conversion to DME and synthetic gasoline is also possible, offering a choice of biofuel applications. Performance of the LPMeOH technology is supported by studies, plant designs, and several real-world, full-scale demonstration systems making 10–230 tons per day at 50%+ conversion.

- **Flexible Gasification Sources.** The LPMeOH process is tolerant to the hydrogen-to-carbon monoxide ratio.

- **Flexible Conversion Rate.** The process allows a variable process-flow rate, enabling intermittent supply from sources such as stranded supply feeds, biomass, solar gasification, and underground coal gasification.

- **DME Conversion Available:** DME is a superior fuel supplement enabling super-clean internal combustion, diesel, and turbine power.

- **Turbine Integration License Available:** Air Product has IP for processes integrating liquid-phase methanol production with power generation including combined-cycle systems.

- **Superior heat integration.** The LPMeOH process offers superior integration of co-generation from the heat of reaction.

---

**Find Out More**
Air Products and Chemicals, Inc.  
7201 Hamilton Boulevard  
Allentown, PA 18195-1501  
Contact: Greg Wolf, Technical Licensing  
Tel 610 481-4241  
Email wolfrg@airproducts.com

---

**tell me more**
www.airproducts.com

© Air Products and Chemicals, Inc., 2010  
Pub No. 342-10-001-GLB