



GEL-O-FUEL

NCL Innovations: Solutions from CSIR India

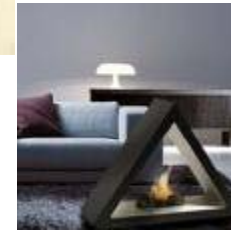
Technology

- Polymer based gel that can absorb organic solvents
- Used to absorb methanol, ethanol and other organics solvents/fuels
- Producing fuel gels
- That can be used in cooking, heating food and other applications

Applications

□ Solid fuel

- Fireplaces
- Patio/garden/yard burners
- Outdoor cooking
- Camping/travel/guest houses/hotels
- Decorative uses



click image to enlarge



□ Chafing dish fuel

- Catering
- Cooking



Images courtesy: Google Images

Market Potential

- The hospitality industry is a high growth industry
 - ▣ To meet the current demand, it has to more than double in size*, with corresponding increase in catering needs
- Indian catering industry is worth over Rs. 57,000 Crore, with high growth rate**
 - ▣ Even with a small market share, revenue generation would be impressive
- With an expanding market, and a very clear target market, Gel-o-Fuel has great potential

*<http://www.business-standard.com/india/news/kit-hotels-in-indiademandsupply/351939/>

** PROCESSED FOOD INDUSTRY. Jul 31, 2007; pg 14

Value

- Effective, flexible, compact source of fuel
- Improved burning characteristics
 - ▣ No soot, pleasant blue flame
 - ▣ Higher burning efficiency
- Cheaper to produce
 - ▣ Does not need other gelling agents
 - ▣ Existing gels use a commercial polymer (expensive)
 - ▣ Gel-o-fuel uses cheaper raw-materials
- Easy availability of raw materials

Technology Status, IP Status

- Technology has been successfully demonstrated at the lab scale
- On the look out for partners to license/scale up technology
- US patent (6,794,467) has been granted
- Ready to be licensed

Links & References

- US Patent 6,794,467 [Link](#)

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Summary

Technology Summary	
Technology title	Gel-o-fuel
Industry /sector	Services/Construction (hospitality/design-decoration)
Year of development	2003
Related patents (with links)	US Patent 6,794,467
Technology readiness level	Demonstrated at lab-scale
Licensing status	No current licenses/Ready to be licensed
Encumbrances	None
Availability	Yes