

Federal Biobased Products Preferred Procurement Program (FB4P) Process for Industry Investigation

Designation Item

This section details the item that has been investigated for designation in the FB4P.

Item Investigated: Biofluid Filled Transformers

Item Description: Electro-mechanical equipment used to handle electrical power, filled with eco-friendly biobased fluid.

Industry Investigation

There are four main sources of information used to gather data about items for designation. These include Internet search engines, the Thomas Register, industry associations, and biobased industry contacts. Each of these sources provides different results. The Internet search engines and the Thomas Register provide many results when a keyword is entered. However, when investigating products through the industry associations and biobased industry contacts, the results tend to be product or company specific. A lengthy, but thorough list of biobased companies which product the designation item can be developed best by utilizing all four information sources.

Internet Search Engines

When searching the Internet, each search engine utilizes a different algorithm to find related topics. To maximize results and ensure correct data, keywords are entered into several search engines. Primary search engines include Google, Yahoo, WebCrawler and Meta Crawler.

Search Engine	Keywords	Results
Google	Biofluid Filled Transformers Biobased Fluid Filled Transformers Transformers Biofluid Power Biofluid Transformers	www.cooperpower.com www.cargill.com wlp.waverlyia.com/docs/FR3.pdf www.techoils.cargill.com
Vivisimo	See above	www.ermco-eci.com www.abiluni.org www.bio-gem.com/cooper.html
Alta Vista	See above	www.tipmont.org

Thomas Register

The Thomas Register, a free web service found at <http://www.thomasregister.com/>, provides a database of over 173,000 companies that can be searched by company name, product name or keyword. Each result contains contact information and may also include other useful information such as a product catalog.

Keyword	Results
Biofluid Filled Transformers	www.aveva-td-transformers.com www.magwindings.com/page05.htm www.currentmidwest.com/transformers.htm
Biobased Fluid Filled Transformers	www.wackersilicones.com Molykote Lubricants - From Dow Corning Royal Purple, Ltd

Transformers Biofluid	www.johnsoncoil.com www.regionalmfg.com www.lenco-elect.com
Power Biofluid Transformers	www.control-transformer.com/products.htm Delta Star, Inc.

Industry Associations

Industry associations provide a good source to identify potential manufacturers, determine additional keywords for internet searches, and provide general descriptions of products within an item. Many associations maintain official websites with lists of member organizations and in some cases catalogs of available products.

Association Investigated / Contacted	Results
Western Area Power Administration The Transformer Association Power Sources Manufacturers Association Institute of Electrical and Electronics Engineers (IEEE) American Public Power Association (APPA) Independent Lubricant Manufacturers Association	Cargill Industrial Oils and Lubricants Cooper Power Systems

Biobased Company Contacts

Company contacts come as a result of interaction with government officials, researchers, and industry representatives. FB4P staff follow-up on personal referrals or potential leads to possible biobased products.

Company	Contact Person	Results
Cargill Industrial Oils & Lubricants	Mr Luis Del Valle	BioTrans 1000 BioTrans 5000
Renewable Lubricants, Inc.	Ms. Jacqueline Garmier	Bio-ultimax 1000 Dielectric Hydraulic Fluid ISO 32
Cooper Power Systems	Mr. C. Patrick McShane	Envirotemp FR3

Conclusion

The results from the four information sources indicate that 5 manufacturing companies in the United States are currently producing Biofluid Filled Transformers that may be considered for inclusion in the Federal Biobased Products Preferred Procurement Program.