



Dielectric Fluid Testing Program

Preventive Maintenance for Asset Management

Engineered Fluids, Inc.
St. Petersburg, FL USA

Products And Services for Electrical Maintenance

Engineered Fluids makes a variety of products for Maintenance of Electrical Equipment:

Dielectric Fluids- Dielectric Coolant Fluids for EVs, Data Centers, Electronics, Motors, Battery Arrays, Transformers

Dielectric Solvents and Cleaners – Safe and Effective Removal of Oils, Dirt, Grease and Pollution from any electrical equipment

OC-100® Citrus Cleanup – Powerful, Citrus-based cleaner removes oils and dirt from non-electrical surfaces



Products And Services for Electrical Maintenance

Laboratory Analysis Services – Complete laboratory analysis services to assess the condition of in-service or used Dielectric Coolants.

Additives for Fluid Maintenance -
Concentrated Protection for Dielectric Fluids

- Concentrated Antioxidants
- Corrosive Sulfur Stop Additives



Laboratory Analysis Services

Dielectric Coolant Quality Declines over Time

Ageing, contamination, oxidation and handling all affect the characteristics of dielectric coolants. Over time, the coolant's electrical and heat transfer properties can deteriorate and affect the operation of electrical components.

Engineered Fluids Recommends Annual

Testing - Following a regular Preventive Maintenance schedule of sampling and analysis of the Coolant prevents unwanted downtime or failures.



Dielectric Fluid Testing Program - How it Works:

Engineered Fluids will send a Sample Collection Kit, which contains:

- Sample Collection Bottle
- Sample Collection Tube and funnel or Sampling Pump, as needed.
- Self-Stick Identification Labels
- Leak-Proof Sealing Bag
- Complete Instructions
- Return Mailer

The Customer sends a sample back to Engineered Fluids' lab in Texas



Dielectric Fluid Testing Program - How it Works:

Within five business days, Engineered Fluids will send a Dielectric Coolant Analysis Report.

- Verifies all electrical and physical characteristics of the Coolant
- Compares Coolant's characteristics against Engineered Fluids' Criteria for Continued Use or OCP Recommendations
- Contains a complete Infra-Red scan to determine the presence of oxidation byproducts and contaminants
- Recommends any Corrective Actions Needed



DOC.ID: FORM-AIDC-20240701

Dielectric Coolant Analysis

Report Date: July 1, 2024

Sample I.D.: 20240625

Customer:

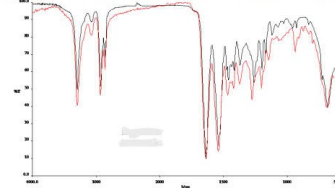
Report ID: 20240702BMI

Sample Date: June 17, 2024

Fluid Type: ElectroCool EC-110

Characteristic & Method	EF Minimum Requirements for Continued Use ElectroCool EC-110	Test Result
Appearance D1524	Bright & Clear	Bright & Clear
Color, D1500, ASTM units	1.5 max	L0.5
Neutralization Number, D-974, mg KOH/g:	0.10 maximum	0.01
Water Content, D1533, ppm:	65 maximum	36
Dielectric Breakdown Strength, ASTM D1816 (2 mm gap)	12 minimum	27
Power Factor, D-924, %, @ 40°C.:	0.30 maximum	0.05
Specific Gravity	0.85 maximum	0.82

Infrared Scan: Library 2024065BMI. All Indications Normal.



Conclusion: All Key Characteristics are within normal values for service-aged ElectroCool EC-110 and indicate normal operation of this system. This sample of ElectroCool EC-110 is considered suitable for continued use.

Recommendation: Sample and retest in 12 months or if there is an adverse event. In case of any questions, call +1-725-218-1985 or email to support@engineeredfluids.com


 Dr. David Sundin, Chief Scientist
 Engineered Fluids, Inc.

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Dielectric Fluid Testing Program

Laboratory Analysis Services are now included with all sales of ElectroCool and AmpCool Dielectric Coolants

Contact Engineered Fluids' Sales Department for more information!

Be sure to ask about Engineered Fluids' Closed-Loop Collection and Recycling Services!





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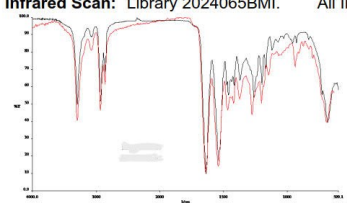
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