

The background of the image shows a laboratory setting with several test tubes in a rack. The test tubes contain liquids of various colors, including yellow, orange, and red. The test tubes are labeled with numbers like '40', '41', '42', and '33'. Overlaid on the left side of the image are three large, overlapping circles in cyan, green, and purple. The text 'edp' is in a white, lowercase, sans-serif font, and 'Labelec' is in a smaller, white, sans-serif font below it.

edp
Labelec

Center of technical excellence

Insulating materials

Insulating materials

About 99% of our activity lies in the field of accreditation by NP EN ISO 17025 and excellence performance in all of the interlaboratory comparison tests, carried out by more than 30 international laboratories.

Our laboratory works to several countries including Portugal (mainland and islands), Spain, England, France, Belgium, Italy, Romania, Poland and Sweden and does around 58000 insulating materials analyses per year.

Insulating materials

- Preventive supervision and remaining life time determination of electrical equipment, by oil analysis
- determination of health index of transformers, obtained by aggregation of oil condition, electrical trials, thermography and visual inspections
- transformer insulating oils reclamation
- transformers faults diagnosis
- characterization of insulating oils corrosive effects
- chlorine detection test and quantification of PCB's
- characterization of the state of insulating paper
- post-mortem transformer studies



- new insulating oils reception tests
- compatibility tests between different kinds and/or different aging states of oils
- consulting on online monitoring of transformers
- characterization of vegetable oil behavior
- tests to characterize the state of dielectric solvents
- activity in IEC – International Electrotechnical Commission – TC 10 – fluids for electrotechnical applications
- activity in CIGRE – Conseil International de Grands Réseaux Electriques – SCD1 – materials and emerging test techniques
- development of M.S.c thesis and internships in collaboration with universities.



Tests & trials



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