

# Analysis of PCBs in oils

PCBs (polychlorinated biphenyls) are chemically very stable. That is why they used to be added to insulating fluids such as oil and trichlorobenzene for electrical appliances. The most common PCB oils are Askarel, Clophen, and Pyralène.

Since the 1970s, studies have proved unequivocally that PCBs are poisonous. They are harmful to human and animal health and cause numerous damaging effects. In addition, PCBs are Persistent Organic Pollutants or POPs and remain in the environment for a very long time.

European legislation (Guideline 96/59/CE) regarding insulating oils requires the phased removal of PCBs in electrical appliances such as capacitors and transformers. All appliances that are contaminated with PCBs have been inventoried. By 2010, all of these must be eliminated according to specific treatments.

PCBs in oils are analysed in line with strict standards.

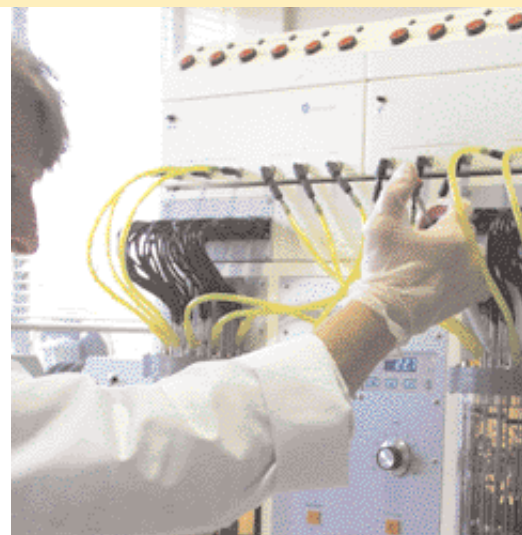
## ■ Applicable standards

International and European standards define the method to determine the concentration of PCBs in insulating oils.

The international standard CEI 61619 states the detailed analysis of 109 PCB-related substances (congeners) in insulating oils.

The European standards EN 12766 (1 and 2) require less detailed analyses. They use extrapolations based on analytical results to obtain the final concentration.

Laborelec uses these three international standards for its PCB analyses.



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## PCB analyses in oils

### ■ Laborelec: BELTEST accreditation

#### (BELAC: member of the European Cooperation for Accreditation)

Laborelec's competency in analyzing PCBs in oils is recognized by BELTEST. In November 2002, Laborelec obtained accreditation for the determination of the total concentration of PCBs and for the quantification of a number of different congeners in mineral and synthetic oils.

BELAC is the Belgian representative at the European Cooperation for Accreditation. This means that accreditations submitted by BELAC are recognized internationally and are equivalent to those submitted by other testing organizations such as Cofrac in France and Sinal in Italy.

### Specialized advice

#### ■ Analyses of PCBs in fluids and solid matter

You can call upon Laborelec to determine PCB concentrations in oils, fluids, and solid matter.



### Five reasons for you to choose Laborelec:

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- you get access to more than 40 years of experience;
- you get rapid service with reliable solutions;
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