

FREQUENTLY ASKED QUESTIONS

CLOR-N-OIL®

- 1) Can Clor-N-Oil be used to determine PCB contamination of used motor/lubricating oils?**
- 2) Can Clor-N-Oil be used to test paint or window caulking?**
- 3) What is the shelf life of the Clor-N-Oil kits?**
- 4) Can kits be used past their expiration date?**
- 5) How should the kits be stored?**
- 6) Can a frozen kit be used?**
- 7) There are salt crystals around the cap or on the box - is it okay to use the kit?**
- 8) Which is the right kit to use - 20, 50 or 500 ppm?**
- 9) Causes of false positive results**
- 10) Cause of false negative results**

1) Can Clor-N-Oil be used to determine PCB contamination of used motor/lubricating oils?

No. The Clor-N-Oil PCB field screening kits can only be used to test transformer oil (dielectric fluid). The kits do not work on used motor/lubricating oils because the test method does not specifically identify the presence of PCBs. The kits detect CHLORINE associated with the PCB molecule. Mineral oil, used in electrical equipment, does not normally contain any background chlorine that would cause false positive results, but most other types of lubricating/industrial oils can contain 200 ppm or more of chlorine from additive packages and other sources. When testing mineral oil (transformer oil), a positive result is presumed to be due to PCBs based on chlorine detected in the sample, but laboratory analysis would be needed for confirmation.

2) Can Clor-N-Oil be used to test paint or window caulking?

No, there are too many possible interferences, and the extraction chemistry is not designed for these matrices. Clor-N-Oil can only be used to test transformer oil.

3) What is the shelf life of the Clor-N-Oil kits?

The kits have a one year shelf life. The expiration date is printed on the side of each kit box. (**NOTE:** Disregard any expiration date printed on the foil bag inside the shipping carton. The date on the foil bag refers only to the bag, it has nothing to do with the kits.)

4) Can kits be used past their expiration date?

The indicator reagent degrades over time and the kits lose the ability to make the purple color change. False positive reporting is possible with expired kits.

5) How should the kits be stored?

The Clor-N-Oil kits do not require special storage (i.e. refrigeration) but we recommend storing the kits in a cool, dry place. **IMPORTANT:** Keep kits out of excessive heat! The kits should never be kept near heating units or in vehicles during summer months. Heat in excess of 100F can destroy the chemistry of the kits in a matter of days. (False positives will result) If the kits must be kept in vehicles, they should be kept cool in an insulated container with an ice pack, if needed.

6) Can a frozen kit be used?

Freezing doesn't affect the quality of the chemistry, but frozen kits should be thawed thoroughly and brought to room temperature before using. Very cold temperatures may slow the chemical reactions requiring longer wait times to achieve the proper results.

7) There are salt crystals around the cap or on the box - is it okay to use the kit?

No. This indicates that the clear buffer solution in the white capped tube has leaked. This is usually caused by pressure changes in an airplane cargo hold during shipping. The buffer solution should be approximately ½ inch above the 5 ml line embossed on the tube. If the tube does not contain the proper amount of buffer solution, hold the kit aside and contact Dexsil for a replacement kit.

8) Which is the right kit to use - 20, 50 or 500 ppm?

There are 3 EPA categories for classifying PCB content of transformer oil:

Less than 50 ppm = Non-PCB

50-499 ppm = PCB contaminated

500+ ppm = PCB oil/equipment

In most cases, the Clor-N-Oil 50 kit would be the starting point for classifying in-use equipment.

9) Causes of false positive results

- Presence of any other source of organic or inorganic chlorine; including chlorinated solvents, road salt, seawater.

- Expired kit

- Sulfur greater than 1%

- Carbon chunks resulting from equipment fire

- Clor-N-Oil kits are calibrated on Aroclor 1242 (42% chlorinated). More heavily chlorinated Aroclors (i.e. 1254 or 1260) may result in false positive reporting.

10) Cause of false negative results

- Water content greater than 5%

- Alcohols, acetone, ketones, and acids may destroy the sodium reagent