

PCBs - The Electrical Industry

Steering Committee - ANSI - C107
St. Louis, Mo. 11/11/71

Pertinent comments relative to PCBs for use by the electrical industry and for consideration by the sub-committees on capacitors and transformers, include:

1. The electrical industry has no suitable fire-resistant electric fluid replacement for PCBs, polychlorinated biphenyls used in the askarel class of transformers and capacitors.
2. Because of this essential need and as the capacitors and transformers are hermetically sealed, Monsanto continues to select PCB fluids for use only in this particular electrical apparatus and only as "make-up" fluid (no new systems) and a few carefully regulated closed system heat transfer applications.
3. Because the highly chlorinated PCBs persist in the environment, Monsanto has removed essentially all of the polychlorinated hexachlorobiphenyls from capacitor askarel. The product used exclusively is called Aroclor 1016. All polychlorinated hexachlorobiphenyls have been removed from the askarel type transformer fluids.
4. Strict and effective measures have been taken to avoid the release of PCBs into the environment at Monsanto's plants.

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the facilities used where askarel transformers and capacitors are made.

5. By discontinuing sale of PCBs for non-electrical applications, about 75 percent of the more persistent types have been removed from commerce.
6. The posture of the FDA includes:
 - a) "We reject the need and in fact the feasibility as we have proposed for an outright ban on the substance. Although the use of PCBs requires control, an outright ban is not feasible and would not be in the best interest of the consumer."
 - b) "All available evidence indicates that PCBs (in terms of acute toxicity) are classifiable as being of moderate toxicity." It was noted that PCBs are less toxic than DDT which is one of the safest pesticides to humans in acute toxicity terms.
7. When fed orally to standard test animals PCBs were found to be essentially non-toxic.
8. FDA guide lines for maximum levels of PCB allowed in various products are:

Fish	5 ppm
Chickens	5 ppm
Milk	0.2 ppm
Eggs	0.5 ppm
Catfish meal	0.3 ppm

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9. Prolonged exposure of PCB ...
be avoided to prevent p ...
10. Prolonged exposure to v ...
to prevent possible dama ...
mg per cubic meter of air ...
safe level of exposure ... day.
11. There is no evidence fr ...
are carcinogenic.
12. When PCBs are decompose ...
virtually entirely hydr ...
formed at all, the am ...
13. Steps taken and judgem ...
rials from the electrica ...
 - a) Monsanto and others provide spec ...
incineration and gas scrubber for ...
destroy scrap PCB fluids. The scrap fluid may ...
to Monsanto Co., Sauget, Ill., attention sup ...
A246 for incineration at 3 cents per pound.
 - b) All Monsanto PCB product labels carry this ...
is also being placed onto askarel transformers
 - c) It is the consensus that it is not feasible ...
and incinerate failed capacitors ...
should be buried in a land-fill ... from ...
or other sources of water.
The incineration equipment already designed to take
place of land-fills has been demonstrated fully ca

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of destroy- iller capacitors as used f
cent ball- r-r- purposes in air co:
etc. To is or sole of destr
impregna- s. e
moved fr e
It is fo ver e
come into e
time th d e

- d) The sol- e
range o ion, e
is that e
e) Solid scrap ion includ
cores shou e
ing or s e
chloroeth ylene e
degreasin e
cinerate e
Monsant- e

Be...

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ANSI C57 TERMINOLOGY

OIL

The term "oil" includes the following liquids:

1. Uninhibited Oil - Uninhibited oil to which no synthetic compound has been added.
2. Inhibited Oil - Inhibited oil to which a synthetic compound has been added.
3. Askarel - Askarel is a synthetic liquid which, when decomposed, produces only nonexplosive gaseous products.

insulating and cooling

mineral transformer oil in which an inhibitor has been added.

mineral transformer oil in which an inhibitor has been added.

flammable insulating liquid which, when decomposed, produces an electric arc, etc.

ATTACHMENT

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