Polychlorinated Biphenyls

A Report Prepared by the

Committee on the Assessment of
Polychlorinated Biphenyls in the Environment

Environmental Studies Board
Commission on Natural Resources
National Research Council

NATIONAL ACADEMY OF SCIENCES
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Chemical Abstracts
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3) registry number;
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al code number;
formula and the weight
each ingredient; and
each organic

ncertain whether a
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cause many substances
mixtures such as
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e, and common name;
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he Chemical Abstracts

CAS) registry number;
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ss Guidelines require
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ents An indication of
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are to be included.

ty of chemical
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of product weight

(100 μg/g). For example, as shown in Table 3.2, the amount of chlorodibenzofurans (CDFs) reported in individual samples of commercial PCB products is substantially below this limit, and low-level exposures to CDFs have been reported to produce toxic effects in animals (Zitko et al. 1973, Nisbet 1976, Oishi and Hiraga 1978, Oishi et al. 1978, International Agency for Research on Cancer/IARC, in press). Thus a listing of all identifiable "contaminants" or unintentionally added ingredients should be required to make possible a proper evaluation of the potential toxicity of new compounds. For those ingredients known to be or suspected of being hazardous, an expected maximum limit within the product should be stated, even if this limit is less than 100 μg/g of product weight.

Declaration and Certification of Ingredient Limits
Estimates of upper and lower limits should be established for each ingredient as well as for any impurities known to be present. The limits should be presented as percentages of the total product.

Committee's Comments: In addition, quantities should be established for impurities that may be expected to arise during normal use of the product and under specified disposal conditions.

TABLE 3.2 Amounts of Chlorodibenzofurans Detected in Commercial PCB Mixtures

		μg/g
Aroclor	1248	2.0
	1254	1.7
	1260	1.0
	1016	ND (less than 0.001)
Clophen	A-60	8.4
Phenoclor	DP-6	13.6
Kanechlor	300	1.0
	400	18.0
	500	4.0
	600	5.0

ND indicates not detected.

SOURCE: Modified from Nisbet (1976).

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