ORGANISATION FOR ECONOMIC
COOPERATION AND DEVELOPMENT

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Environment Directorate

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(1st Revision)

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To : Members of the Sector Group on Unintended Occurrence of Chemicals in the Environment

/Copy to : National Delegations/

Or. Engl.

SECTOR GROUP ON UNINTENDED OCCURRENCE OF CHEMICALS IN THE ENVIRONMENT

PROTECTION OF THE ENVIRONMENT BY CONTROL OF POLYCHLORINATED BIPHENYLS (PCBs)

Information Exchange on PCBs

This report contains the statistics and information received from Member countries in accordance with the Information Exchange Procedure invited in the Decision of the Council on the Protection of the Environment by Control of Polychlorinated Biphenyls /C(73)1 (Final)/, and set out in the Information Exchange Schedule NR/ENV/74.6. All information and statistics refer to the calendar year 1973 unless otherwise stated.

11.857

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INFORMATION EXCHANGES ON PCBs

1. Replies have been received from fifteen Member countries, although not all of these have been able to provide statistical information.

2. The report is organised under the following rubrics:

   I Production, Trade and Use of PCBs. The statistics are presented in two Tables, with listings by country, and each Table is supported by a Commentary, also by country.

   II Disposal of Used or Contaminated PCBs.

   III Chemicals Introduced into Commerce as Replacements for PCBs.

   IV General Information on PCB Monitoring and Control.

   The information provided under rubrics II-IV is given by country. (The rubric numbering scheme is the same as that of the PCB Information Exchange Schedule).

GENERAL COMMENTS

The Reporting Schedules

3. Despite the apparent complexity of the Information Exchange Schedules themselves, the replies received from Member countries have shown that they do allow information to be clearly presented. Although no one country may have information to provide under every heading, in those cases where a country has important detailed information to provide, it has generally proved possible for this to be done within the context of the Schedule.

The Specification of PCBs

4. From the replies received, it appears that no PCB in commerce can be described as a mixture of polychlorinated biphenyls and polychlorinated triphenyls. The polychlorinated biphenyls themselves are most simply and satisfactorily specified by the average weight percent of chlorine contained in the product. The PCB product so specified is likely to be a mixture of isomers however: e.g. one reporting country quotes a PCB of 42% by weight of chlorine as containing 11.4% dichloro-, 57.1% trichloro-, 29.4% tetrachloro- and 2.2% pentachloro-biphenyl.

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Small and Large Capacitors

5. Four countries were able to make a distinction in their reported statistics, between small and large capacitors:

Canada In the tabulation submitted, large capacitors are considered to be those containing more than 2 pounds (0.91 kg.) of dielectric fluid. In effect, this means capacitors for use in electric power transmission and distribution systems. Small capacitors are those containing less than 2 pounds of dielectric fluid.

Finland It is inferred from the Finnish submission that a large capacitor is one containing more than 2 pounds of PCB or PCB-containing material.

Norway Small capacitors are considered to be those containing approximately 60 gm of PCB or less.

Sweden The reported statistics distinguish between small and large capacitors, but the distinction between the two categories is not defined.

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I. PRODUCTION, TRADE AND USE OF PCBs

6. Apparent consumption is defined as production plus imports minus exports. Estimates made on this basis, of the total apparent consumption of PCBs by individual Member countries, are given in Table I, together with data on total apparent consumption disaggregated by use and by PCB type. In Table II is assembled overall PCB import and export data as estimated by both importing and exporting countries.

The Apparent Consumption of PCBs (Total) (TableI)

Commentary

7. France The distribution of total production amongst PCB types was as follows:

Type of PCB	Mean weight % chlorine	Metric tons
Di	32	404
Tri	41-42.5	3 627
Totra	48-48.5	711
Penta	54-54.5	1 114
Hexa	58-59	43
Hexa + $\frac{1}{2}$	60-62	3 730
Hepta	62-63	11
Octo	65-66	34
TOTAL	-	9 674

PCBs in the use category Plasticisers were divided between those for resins, rubbers, etc. (462 metric tons), and those for papers, paints, inks, etc. (195 metric tons). PCBs in the use category 'Other' were divided 47 metric tons for resellers, and 68 metric tons for remaining uses such as research, etc.

8. Of the total apparent consumption of 5 386 metric tons, 1 311 metric tons comprised PCBs with a mean weight percent of chlorine of 42.5 or less (i.e. trichloro or less).

9. Germany (F.R.) The information requested is not available to the Federal Ministry of Youth, Family and Health. The manufacturers may provide some information to the Secretariat at a future date. — See addendum

10. Italy The distribution of total production amongst PCB types was as follows:

Type of PCB	Mean weight % chlorine	Metric tons
Fenchlor 42	39	341
Fenchlor 54	52	126
Fenchlor 64	60	1 688
Fenchlor 70	64	84
DK*	70	280
TOTAL	-	2 519

*All references to this PCB are accompanied by a note that they are "for a use not considered in the regulation".

With regard to imports and exports, the figures given are estimates only (cf. commentary for Italy, Table II). It is suggested that the import figure might represent 1 200 metric tons for capacitors, 200 metric tons for transformers, and 200 metric tons for non-dielectric uses. For exports, it is suggested that this might include 122 metric tons for capacitors, 338 metric tons for transformers and 367 metric tons for non-dielectric uses.

11. It has not been possible to distinguish between PCB use in small and large capacitors. However, use in the former is small relative to the latter, and decreasing. PCB use in the category 'Other' refers to use as a fire-retardant in plastics.

12. Netherlands Total apparent consumption is estimated to have declined from a figure of 300-400 metric tons in 1971.

13. New Zealand The figure of 21.78 metric tons for total apparent consumption includes 1.3 metric tons from previously imported stocks.

14. Norway The two estimates of apparent consumption do not agree.

15. Sweden The two estimates of apparent consumption do not agree.

16. Turkey. No PCBs were used in Turkey in 1973.

17. United Kingdom. The distribution of total production amongst PCB types was as follows :

Type of PCB	Mean weight % chlorine	Metric tons
Aroclor 1242	42	2 851
Aroclor 1248	48	451
Aroclor 1254	54	454
Aroclor 1260	60	311
TOTAL	-	4 067

The total consumption was 1 151 metric tons, which corresponded to the apparent consumption of 1 113 tons plus a further 38 tons that were used from the previous year's stock of Aroclor 1254 for transformers. A total of 324 tons of Aroclor 1254 were used in transformers, and 827 tons of Aroclor 1242 in small and large capacitors.

18. United States. The distribution of total production amongst PCB types was as follows :

Type of PCB	Mean weight % chlorine		Metric tons
Aroclor 1221	21		24.53
Aroclor 1016	41.5	12	319.39
Aroclor 1242	42	2	740.56
Aroclor 1248	48		28.95
Aroclor 1254	54	4	018.67
TOTAL	-	19	131.90

With regard to the use of PCBs in transformers and capacitors, definitive figures are not available. 16.04 metric tons of Aroclor 1221 were used in large and small capacitors, 10 673.66 metric tons of Aroclor 1016 in large and small capacitors, 2 812.1 metric tons of Aroclor 1242 in transformers and large and small capacitors, and 2 751.94 metric tons of Aroclor 1254 in transformers alone.

International Trade in PCBs (Table II)

Commentary

19. Canada. Imports from the U.S.A. comprise 385 metric tons of Aroclor 1016 and 900 metric tons of Aroclor 1254. The Canadian report also states that "preliminary reports suggest a small volume of import of transformer grade material from another OECD Member country". — France - 30 Tons (Transformer)

20. France. The recorded import and export figures in this Table refer to the quantities of proprietary products imported and exported. These are mixtures of PCBs with other chemicals such as chlorinated benzenes. Thus the total import figure of 526 metric tons correspond to a PCB import of approximately 300 metric tons. (All PCBs imported contained not more than 42.5 % by weight of chlorine). Total exports of proprietary products totalled 6 136.6 metric tons, distributed as follows :

Export	OECD Member countries	Non-OECD countries	Total
Proprietary Products	3 607.7	2 528.9	6 136.6
PCBs :			
42.5 wt % Cl	1 775	1 245	3 020
42.5 wt % Cl	922	646	1 568
Total	2 697	1 891	4 588

The import and export figures entered in Table I thus correspond to the quantities of PCBs involved.

21. In Table II, the export of 134.5 metric tons recorded for Belgium refers in fact to Belgium and Luxemburg combined.

22. Germany (F.R.) Cf. Commentary to Table I.

23. Italy. Polychlorinated biphenyls are included in two import/export categories :

38.19.901 - polychlorinated biphenyls

38.19.907 - other chemical products and preparations from the chemical industry, not specified (including Askarels).

Total identified exports to OECD Member countries (740 metric tons) comprise 280 metric tons of the PCB DK, and a total of 460 metric tons of chemicals in the category 38.19.987. The countries of destination are not specified. Exports to non-OECD Member countries totalling 367 metric tons are listed under category 38.19.981. Imports of PCBs from OECD Member countries are those recorded under category 38.19.981. (PCBs in imported Askarels are included in category 38.19.987, and thus it has not proved possible to provide exact data for these imported PCBs). The data recorded in Table II are from the "Monthly Statistics of Foreign Trade", from which official figures are available for the period January to July 1973.

24. Finland. Imports from England were Aroclor 1242, and from France Pyralene T2 (54 mean wt. % Cl).

25. New Zealand. Imports include Phenochlor DP5 from France and Aroclor from the United States.

26. Norway. Imports from England were Aroclor 1242, and from France Pyralene 3000.

27. Sweden. Imports from England were Aroclor 1242, and from France Pyralenes 3000 and 3001.

28. Turkey. No PCBs were used in Turkey in 1973.

29. United Kingdom. All 6 metric tons of imported PCBs were Aroclor 1221. The distribution of exports by PCB type was as follows :

Country	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total (by country)
Australia			99		99
Belgium	137			288	425
Finland	304				304
France	27				27
Italy	211				211
Norway	15				15
Spain	101		18		119
Sweden	108				108
Switzerland	37				37
Total OECD	940	-	117	288	1 345
Non-OECD	1 085	452	78	-	1 615

?

30. United States. The distribution of exports by PCB type was as follows :

Country	Aroclor 1221	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Total (by country)
Australia		21.76				21.76
Canada		435.18	103.12		880.57	1 418.87
United Kingdom	6.24					6.24
Total OECD	6.24	456.94	103.12	-	880.57	1 446.87
Non-OECD	-	1 241.41	378.12	38.10	173.59	1 831.22

Canada's Import Data 385. 0 900. 1285.

As supplied to Canadian Dept of Environment in March, 1974.

II. DISPOSAL OF USED OR CONTAMINATED PCBs

31. Austria. No information recorded.

32. Belgium. No information recorded.

33. Canada. No PCB collection or disposal facilities are known to be available in Canada.

34. Finland. During the last three years, PCB-containing waste material has been collected by one company, which is the biggest user of PCBs in Finland. This company (Oy Nokia Ab) manufactures large capacitors. The waste material collected consists mainly of large capacitors, small capacitors, transformers, liquids mixed with PCBs and other chemicals, empty containers, etc. At present Finland does not have the facilities for the safe disposal of this kind of material, and therefore the collected material has been shipped to England. (This has comprised 40 metric tons of wastes collected during the last three years, containing about 12 metric tons of PCBs). However, a prototype of a new type of furnace has been tested in Finland during 1973, and the results when burning PCBs appear to be promising.

35. France. PCB disposal facilities are provided at Pont de Claix. In 1973, an estimated 217 metric tons of used and contaminated PCBs were treated for 139 metric tons recovered and 76 metric tons destroyed. Plant conditions for the destruction of PCBs include a combustion temperature of 1000°C and a gas residence-time of several seconds.

36. Italy. In 1973, the company Caffaro processed liquid Askarels containing 93 metric tons of PCBs : 92 metric tons of which were recovered, and 1 metric ton destroyed. Some by-products are stored at the incinerator site at Brescia awaiting destruction.

37. Japan.

I. PCBs in liquid state, from use as heat transfer media

(1) Collection :

Two manufacturers are collecting PCBs based on the guidance by the Ministry of International Trade and Industry (MITI). As of September 1974, they have collected 6 700 tons of PCB.

(2) Disposal :

PCBs are presently being burned by special incinerators installed by manufacturers, and under government regulation. The National Research Institute for Pollution and Resources of the MITI has carried out a series or researches on the development of complete combustion techniques of PCBs since 1973 using a test plant.

In cases where the average temperature in the incinerator was 1400°C or higher, the concentrations of PCBs in the flue gas washed by water or alkaline water and in the effluent from the incinerator were not detectable. In cases where the temperature was some 1300°C, the PCB concentration in flue gas was at the level of 1/100 of the permissible emission standard.

2. PCBs in carbonless copying papers.

(1) Collection :

Four manufacturers are collecting papers. As of September 1974, they have collected 1 550 tons of papers. In addition, public offices in Japan keep 1 150 tons of papers in their custody.

(2) Disposal :

The National Research Institute for Pollution and Resources of the MITI is carrying out the same combustion study as mentioned above 1 (2). Solidification of the waste papers using concrete is also being studied by manufacturers of the copying papers.

3. PCBs in electric equipment.

(1) Collection :

The Electric PCB Disposal Association, established in August 1973, is planning to collect PCBs in electric equipment under the supervision and guidance of the MITI.

(2) Disposal :

The Association is planning to build disposal plants. The know-how of the disposal would be acquired through the researches done by the Government research Institute.

38. Netherlands. No information recorded.

39. New Zealand. No PCB collection or disposal facilities exist.

40. Norway. The producers of large capacitors export used capacitors for destruction.

41. Sweden. In 1973, the company SUPRA destroyed 0.50 metric tons of PCBs, a combustion temperature of 1400°C being employed.

42. Turkey. No PCB collection or disposal facilities exist.

43. United Kingdom. Redland-Purle Limited (Ellesmere Port, Cheshire) provide high-temperature incineration facilities for liquid PCBs. These facilities are subject to control by the Alkali Inspectorate. Destruction of tonnage quantities was due to commence in December, 1974. The unit operates at a combustion temperature of 1200°C with a gas residence-time of 2 seconds. Combustion trials indicated a stack gas maximum concentration of PCBs of 400 ug/m^3. The HCl concentration in the stack gas must not exceed a statutory limit of 460 mg/m^3. Redland-Purle Ltd. also incinerated PCB liquid at a unit in Rainham, Essex, but this is not now used commercially. 507 metric tons of liquid PCB were processed, of which 482 metric tons were estimated to be destroyed. Dalton and Co., (Belpen, Derbyshire) recovered approximately 40 metric tons of PCBs.

44. United States. Monsanto Industrial Chemicals Co., (Illinois) maintains an incinerator for the disposal of liquid PCB wastes, and which is operated under State of Illinois, Environmental Protection Agency regulations. In 1973, this plant processed 2192.04 metric tons of PCB-containing liquids for an estimate 1972.84 metric tons of PCBs destroyed (none were recovered). The plant operates at a combustion temperature of 1315°C - 1425°C, with a gas residence time of 1-2 seconds. Stack gas concentrations of HCl are typically 3700 ug/m^3, but PCBs are not detectable.

PART III CHEMICALS INTRODUCED INTO COMMERCE AS REPLACEMENTS FOR PCBs

45. The following statements have been received.

46. Canada. No new products are known to have been introduced. It is known that the use of chlorinated paraffins has been extended to replace PCBs in some paints, and that various hydrocarbon products are in use as heat-transfer fluids as replacements for PCBs.

47. Finland. No replacements are used by the biggest PCB-consumers, namely one company making large transformers and another making large capacitors. However, in the chemical industry, the use of PCBs was stopped two years ago and the replacements in use are either synthetic, long-chained chemicals or mineral-oil based products.

48. Japan. The following substitutes have been introduced :

Carbonless Copy Paper Solvents

Alkyl naphtalene : According to the reports published by a medical university in Tokyo, 6-month dose chronic toxicity tests, tests for local irritative actions, and tests for distribution in organs which were carried out in 1973 and 74 have shown that the toxicity of alkyl naphtalene is far weaker than that of PCBs, its irritative action on skin and eyes is small, and it produces no long term effects on body metabolism.

Alkyl phenyl ethane : According to the results of the acute and chronic tests of alkyl phenyl ethane on experimental animals done by a medical university in Tokyo, no remarkable changes are observed.

Heat Transfer Fluids

Mineral oil type : Same as petrochemical products in general.

Diphenyl + Diphenyl ether, Dibenzyltoluene, Alkyl diphenyl, Terphenyl type, Alkyl benzene : These chemicals have been used as heat transfer medium for a long time without any health hazards.
Alkyl-naphtalene : Toxicity as described above.

Insulating oil

Mineral oil type : Same as petrochemical products in general.

Silicone oil : Regarded as physiologically inactive.

49. New Zealand. Companies have been able to replace PCBs with chlorinated paraffins in some uses, but for others, no substitute chemicals are known.

50. United Kingdom and United States. (Monsanto has submitted the following information to the U.K. and the U.S.A.). Carbonless Copy Paper Solvents. Several materials from many suppliers are currently being used as solvents in carbonless copy paper encapsulation coatings. No information is available to fully describe the extent and nature of the replacement solvents currently in use.

51. Industrial hydraulic Fluids. Several replacements for PCBs are available from suppliers, e.g. phosphate ester fluids and ethylene glycol-water mixtures. The extent and nature of the total replacement effort are not known.

52. Heat Transfer Fluids. No fire-resistant heat transfer fluids have been developed to replace those which formerly contained PCBs. Other non-PCB containing heat transfer fluids do exist, however, e.g. fluids of mineral oil and synthetic chemical base have been available from suppliers.

53. Dielectric Fluids. No alternative fluids having the desired fire-resistant properties have been developed for dielectric applications. To minimise the introduction into the environment of the more persistent isomers of polychlorinated biphenyl, resulting from accidental spills or leakage, Aroclor 1254 has been accepted by the U.S. industry as an alternative to Aroclor 1260 as an ingredient in transformer fluids. For capacitors, Monsanto introduced a modified polychlorinated biphenyl mixture from which the higher chlorinated and more persistent homologs were removed. This mixture, Aroclor 1016 in the U.S.A. and Aroclor 1342 in Europe has now replaced Aroclor 1242 as the preferred capacitor fluid.

54. (Proprietary products available from Monsanto for the first three-mentioned uses are : carbonless copy paper solvent - for the U.S.A. Santosol 100, Santosol 200, and for U.K., Santosol 200, 300 and 340; industrial hydraulic fluids - Pydraul, Santosafe; heat transfer fluids - Therminol .Technical data sheets describing some of these products have been received by the Secretariat).

PART IV - GENERAL INFORMATION ON PCB MONITORING AND CONTROL

55. Australia Australia recently submitted a Notification to the OECD Environment Directorate concerning the prohibition of importation of PCBs. This was issued as document 26/NCP/ENV/74.1.

56. Austria PCBs are not being used in agriculture and forestry, i.e. as plant protecting agents. Their occurrence is merely traced by examinations of water specimens.

57. To the extent possible, with existing facilities, the problems concerning pollutants with a low degradability rate and in particular chlorinated hydrocarbons and polychlorinated biphenyls, which are in the foreground of the present considerations, are kept under review as far as water quality questions are concerned in this context.

58. The Federal Institute for Water Biology and Waste Water Research (Bundesanstalt für Wasserbiologie und Abwasserforschung), for instance, submitted on July 12, 1973 a comprehensive report on the level of PCB pollution of Austrian waters, in which it arrived at the following conclusions:

> "Despite intensive investigation it has not been possible to trace the origin of PCB products in Austrian waters. A possible explanation is that such products as semi-finished plastics, auxiliary materials for paints, varnishes and the textile industry, etc. are imported by their trade name, their components not being known to consumers."

This might account for the discrepancy between the quantities reported by Austrian agencies (about 70 tons/year) and the consumption of roughly 3 500 tons/year assumed by international agencies.

59. Producers of PCB compounds can only be major chemical industries. Since it has been ascertained that PCB products are accumulated in organisms in a manner similar to that of DDT, the production has been cut down and in some instances even discontinued.

60. Use is made of PCB products in closed systems serving the heat transfer for hydraulic installations, etc. For most of the other purposes substitutes have been developed which are biologically less hazardous.

61. In the context of water quality systematic investigations concerning the PCB load in Austrian waters could so far not be conducted, nor will this be possible in the near future in view of the fact that there are still more urgent problems awaiting a solution. For this reason no concrete data can be furnished at present.

62. Italy. A copy of the Ministerial Decree of 15th April 1966 from the Italian Ministry of Health, on "Health Instructions for Packaging Materials, Containers and Utensils intended to come into Contact with Food and Substances for Personal Use", has been submitted, together with a modifying decree of 8th March 1968.

63. Japan.

Control of PCBs

The Environment Agency is authorized to set the environmental water quality standards, the effluent standards and standards for disposal of wastes. As for PCBs, these standards are expected to be set in the near future.

Under the Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances (Law No. 117, 1973) which was promulgated in October 1973, and came into force on April 16,1974, polychlorinated biphenyls (PCBs) have been designated as specified chemical substances. Their production, import and use is thereby strictly regulated. The import of the following products using PCBs was prohibited :

1) lubricating oil, cutting oil and hydraulic oil;
2) adhesives, putty and sealants;
3) paints, printing inks and pressure sensitive copying papers;
4) heaters and refrigerators using heat transfer liquid;
5) oil immersed transformers, paper condensers, oil-filled condensers and plastic film condensers, and
6) air conditioners, television sets and electronic ranges.

PCBs can be used exceptionally in main transformers, rectifiers for rolling stock, and certain parts for aircraft.

A Ministerial Ordinance for technical guidance has been issued for the handling of oil containing PCBs used for main transformers and rectifiers for rolling stock. Labeling of PCB-containing oil or parts, goods contaminated by PCBs and their place of storage were established by this ordinance.

Monitoring of PCBs

The national PCB survey was carried out by the ministries and agencies concerned in cooperation with local governments over a 9-month period from July 1973 to March 1974. The principal findings of the survey are as follows :

(1) PCBs in fish and shellfish :-
3 369 samples from 20 sources which were suspected of PCB contamination were analysed. From this analysis, 11 water areas were revealed to be contaminated, therefore, fishermen were asked to voluntarily refrain from fishing in these areas.

(2) PCBs in Water and Bottom Deposit :

1 281 samples from 282 sources were analysed, of which 55 samples (4.3% of those taken) from 22 separate water areas were revealed to exceed the 0.0005 ppm limit.

1 789 samples of bottom deposit were analysed which were taken from 354 sources. The number of water areas with the maximum concentration of PCBs in such deposit of 50 ppm and over is fourteen; those with 50-10 ppm, 37; those with 10 to less than 5 ppm, 21.

(3) PCBs in Soil and Agricultural Products :

105 soil samples from different areas were analysed and levels of PCBs ranged from "not detectable" to 59 ppm. Most of the analyses showed the presence of PCBs at 0.1 ppm or below. PCBs in agricultural products were revealed to be at levels "not detectable" in almost all of the samples.

64. Sweden. Actions for the control of PCBs can be taken under the Act on Products Hazardous to Man and to the Environment (Swedish Code of Statutes 1973 : 329, 334).

65. United Kingdom. A Working Group set up by the Department of the Environment has considered the disposal of PCBs. Its findings will be embodied in a Code of Practice to be published in 1975.

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TABLE I - THE APPARENT CONSUMPTION OF PCBs (TOTAL)[a]

TABLEAU I - CONSOMMATION APPARENTE DES PCBs (TOTAL)[a]

[illegible]/[illegible]
(1st Rev.)

COUNTRY PAYS	Reply received (R) Réponse reçue (R)	Statistics refer to stated year Statistiques se rapportant à l'année citée	Total production of PCBs Production totale des PCBs	Total import of PCBs Importation totale des PCBs	Total export of PCBs Exportation totale des PCBs	Apparent consumption of PCBs (total) Consommation apparente des PCBs (total)	Transformers Transformateurs	Capacitors (large) Condensateurs (grands)	Capacitors (small) Condensateurs (petits)	Heat transfer systems Systèmes caloporteurs	Hydraulic equipment Equipement hydraulique	Vacuum pumps Pompes à vide	Lubricating and cutting oils Huiles de coupe et de lubrification	Plasticisers Plastifiants	Others Autres	Apparent consumption of PCBs (total) Consommation apparente des PCBs (total)
AUSTRALIA																
AUSTRIA	R	-														
BELGIUM	R	1973	0	?	?	?	525( )	180( )		?	?	?	?	?	-	
CANADA	R	1973	0	1 285	0	1 285	900(54)	200(42)	185(42)	0	0	0	0	?	-	1 285
DENMARK																
FINLAND	R	1973	0	240	0	240	40(54)	200(42)	0	0	0	0	?	0	-	240
FRANCE	R	1973	9 674*	300	4 588	5 386	2 940( )	1 300( )		71( )	75( )	6( )	222( )	657( )*	115( )*	5386*
GERMANY (F.R.)*	R	-														
GREECE																
ICELAND																
IRELAND																
ITALY	R	1973	2 519*	1 600*	1 107*	3 012	1 227(64)	1 422(42,54)*		0	0	0	0	290(42-64)	73(70)*	3 012
JAPAN	R	-														
LUXEMBOURG																
NETHERLANDS	R	1973	0	?	0	?	?	?	?	?	?	?	0	0	-	150-200*
NEW ZEALAND	R	1973	0	20.48	0	21.78*	7( )	0	0	0	0	3.7( )	0	11.08( )	-	21.78
NORWAY	R	1973	0	19.91	0	19.91*	0	24.5(42)	2.3( )	0	0	0	0	0	-	26.75*
PORTUGAL																
SPAIN																
SWEDEN	R	1973	0	316.4	0	316.4*	0	325(42)	0	0	0	0	0	0	-	325*
SWITZERLAND																
TURKEY*	R	1973														
UNITED KINGDOM	R	1973	4 067*	6	2 960*	1 113*	324(54)	827(42)		0	0	0	0	0	-	1 151*
UNITED STATES	R	1973	19 131.9*	?	3 278.1	?	>2 752*	>10 690*								

Note: a : All quantities are in metric tons. Numbers in brackets give the weight % of chlorine in the PCB employed in the specified use. Toutes les quantités sont en tonnes métriques. Les chiffres entre parenthèses représentent le pourcentage en poids de chlore des PCBs utilisé pour chaque cas spécifié.

* : Indicates that this entry is specifically referred to in the Commentary attached to this Table. Indique qu'il est particulièrement fait reference à cet élément dans le Commentaire joint à ce Tableau.

MONS 047276

Compl. footnote (a) / Complément de note (a)	Statistics related to year ended / Statistiques se rapportant à l'année	Importing country / Pays importateur — Exporting country / Pays d'origine	AUSTRALIA	FRANCE*	GERMANY (F.R.)	ITALY*	JAPAN	UNITED KINGDOM*	UNITED STATES*	UNIDENTIFIED (OECD) / NON-IDENTIFIE (OCDE)	World import / Importation totale
		AUSTRALIA		39.6				99	71.76		
d	-	AUSTRIA		111.7							
d	1973	BELGIUM		134.7*				425			
d	1973	CANADA*		19.5					4257		1225
		DENMARK		19.6							
d	1973	FINLAND*		40 42.6				304 200			260
d	1973	FRANCE*	1		1	520		27			
M	-	GERMANY(F.R.)*		400.6							
		GREECE		11.5							
		ICELAND									
		IRELAND									
d	1973	ITALY*		104.1 396	9.0			211		201	1917
R	-	JAPAN									
		LUXEMBOURG		*							
d	1973	NETHERLANDS		69.0							
d	1973	NEW ZEALAND*		16.4 17.9					6		1021
d	1973	NORWAY*		10.1 10.03				15 9.03			1.32
		PORTUGAL		24.4							
		SPAIN		403.0				119			
d	1973	SWEDEN*		20.9				108 109.3			1100
		SWITZERLAND		94.0				37			
d	1973	TURKEY*									
R	1973	UNITED KINGDOM		216.5					6 0.24		6
d	1973	UNITED STATES		2.5							
		UNIDENTIFIED (OECD)									
		TOTAL EXPORT (OECD)		1 207.7		740*		1 345	1 44..		
		TOTAL EXPORT (non-OECD)		1 520.9		307		1 615	1 331.0		

Note: a : All quantities are in metric tons.
Toutes les quantités sont en tonnes métriques.

* : Indicates that this entry is specifically referred to in the Commentary attached to this Table.
Indique qu'il est particulièrement fait référence à cet élément dans le Commentaire joint à ce Tableau.

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