

**Request for Information<sup>A</sup> of Mercury in Products and Processes, Quantities Used, Demand, Level of Substitution, Technology Change-over, Available Substitutes**

**Obs.** Information about import/export from: [www.desenvolvimento.gov.br/aliceweb](http://www.desenvolvimento.gov.br/aliceweb), in april 2008. Using the following codes:

8506.30.90 - OUTRAS PILHAS/BATERIAS ELETR.DE OXIDO DE MERCURIO (Others Mercury Oxide batteries)

8539.32.00 - LAMPADAS DE VAPOR DE MERCURIO/SODIO OU HALOGENETO METAL (Lamps/lighting with mercury/sodium or other metal halogen)\*

8539.3100 - LAMPADAS/TUBOS DESCARGA, FLUORESCENTE, DE CATODO QUENTE (Lamps/lighting fluorescent tubes, hot cathode) \*

9018.9092 - APARELHOS P/MEDIDA DA PRESSAO ARTERIAL (Blood pressure gauges) \*

9025.1110 - TERMOMETROS CLINICOS, DE LIQUIDO, DE LEITURA DIRETA (Thermometers - liquid) \*

**\* It does not means that all of this products contain mercury.**

A. Products containing mercury	Estimated Demand /Quantity used (in tonnes/year) <sup>B</sup>	Level of mercury substitution <sup>C</sup>	Experience with technology change-over/ alternatives <sup>D</sup>															
1. measuring and control devices																		
1. a. thermometers (liquid)	<p>Thermometers – liquid (ton)</p> <table border="1"> <thead> <tr> <th></th> <th>Importation</th> <th>Exportation</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>105</td> <td>0,5</td> </tr> <tr> <td>2005</td> <td>54</td> <td>0,4</td> </tr> <tr> <td>2006</td> <td>68</td> <td>0,6</td> </tr> <tr> <td>2007</td> <td>56</td> <td>0,4</td> </tr> </tbody> </table>		Importation	Exportation	2004	105	0,5	2005	54	0,4	2006	68	0,6	2007	56	0,4	2	Mercury Program, from the Ministry of Labours, since 2006: promoted voluntary substitution of thermometers and sphygmomanometers at State level (São Paulo State). At present, in São Paulo, 94 clinics and hospitals had already substituted thermometrs and sphygmomanometers.
	Importation	Exportation																
2004	105	0,5																
2005	54	0,4																
2006	68	0,6																
2007	56	0,4																

<sup>A</sup> Please provide latest and best available information by 11 April 2008

<sup>B</sup> Please indicate the source of information-could be national statistics, import/export data, or estimates based on production or use of relevant products

<sup>C</sup> Please use the following to designate level of substitution

- 0- no available substitutes in the market
- 1- substitutes available in market but minimally used
- 2- substitutes available in market and commonly used

<sup>D</sup> Please state positive or negative experiences with alternatives, and related costs if available

1. b. blood pressure gauges (sphygmomanometers)	<p><b>Sphygmomanometers (ton)</b></p> <table border="1"> <thead> <tr> <th></th> <th>Importation</th> <th>Exportation</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>183</td> <td>1</td> </tr> <tr> <td>2005</td> <td>300</td> <td>7</td> </tr> <tr> <td>2006</td> <td>260</td> <td>14</td> </tr> <tr> <td>2007</td> <td>430</td> <td>5</td> </tr> </tbody> </table>		Importation	Exportation	2004	183	1	2005	300	7	2006	260	14	2007	430	5	2	<p>Manometers: substitutes available. The Ministry of Health prohibits, until 2004, uses of artisanal equipments for blood pressure with mercury column. Sphygmomanometers: substitutes available; no specifically regulation.</p> <p>Mercury Program, from the Ministry of Labours, since 2006: promoted voluntary substitution of thermometers and sphygmomanometers in São Paulo State. At present 94 clinics and hospitals had already substituted thermometrs and sphygmomanometers.</p>
	Importation	Exportation																
2004	183	1																
2005	300	7																
2006	260	14																
2007	430	5																
1. c. thermostats	No information																	
1. d. others (specify)	-																	
2. batteries	<p><b>Others Mercury Oxide batteries (Kg)</b></p> <table border="1"> <thead> <tr> <th></th> <th>Importation</th> <th>Exportation</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>3</td> <td>15</td> </tr> <tr> <td>2005</td> <td>1</td> <td>0</td> </tr> <tr> <td>2006</td> <td>1</td> <td>2</td> </tr> <tr> <td>2007</td> <td>8</td> <td>0</td> </tr> </tbody> </table>		Importation	Exportation	2004	3	15	2005	1	0	2006	1	2	2007	8	0	2	<p>Regulated by environmental sector (National Environmental Commission – CONAMA), since 1999.</p> <p>Maximum limit of Mercury (Zinc-Mn and alkaline-Mn): 0,010% w/w.</p> <p>Button batteries: Max conc of Hg - 25 mg.</p> <p><b>Regulation under revision.</b></p>
	Importation	Exportation																
2004	3	15																
2005	1	0																
2006	1	2																
2007	8	0																
3. dental use	No information	2	<p>Resolution from Health sector – 2004: management of residues from health sector.</p> <p>Mercury residues – separate in a special recipient, under water, and sound management.</p>															
4. electrical and electronic devices (excluding batteries and lamps )																		
4.a. electrical switches	No information																	
4.b. electrical relays	No information																	

5. lamps/lighting (e.g. fluorescent tubes and CFLs)	<p>Lamps/lighting with mercury/sodium or other metal halogen (ton)</p> <table border="1"> <thead> <tr> <th></th> <th>Importation</th> <th>Exportation</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>590</td> <td>288</td> </tr> <tr> <td>2005</td> <td>568</td> <td>273</td> </tr> <tr> <td>2006</td> <td>925</td> <td>262</td> </tr> <tr> <td>2007</td> <td>861</td> <td>395</td> </tr> </tbody> </table> <p>Lamps/lighting fluorescent tubes, hot cathode</p> <table border="1"> <thead> <tr> <th></th> <th>Importation</th> <th>Exportation</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>9,420</td> <td>4,575</td> </tr> <tr> <td>2005</td> <td>9,334</td> <td>5,734</td> </tr> <tr> <td>2006</td> <td>12,360</td> <td>6,393</td> </tr> <tr> <td>2007</td> <td>15,868</td> <td>5,524</td> </tr> </tbody> </table>		Importation	Exportation	2004	590	288	2005	568	273	2006	925	262	2007	861	395		Importation	Exportation	2004	9,420	4,575	2005	9,334	5,734	2006	12,360	6,393	2007	15,868	5,524	2	<p>In March 2008, the National Environmental Commission – CONAMA established a Working Group to discuss regulation aimed to decrease the mercury content in lamps, and management of waste mercury.</p> <p>A WG coordinated by the Labour sector elaborated a technical document, in 2006, which suggested 10 mg of Hg/lamp as maximum limit.</p>
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6. other products																																	
6.a. pharmaceuticals (e.g. disinfectants, vaccine preservatives)	No information		Regulation from Ministry of Health (Portaria nº 551, de 13/07/98) regulates the use of Thimerosal as preservative in the Triplice Diphtheria, pertussis and tetanus vaccine. Other Regulation (Portaria nº 176/96) regulates the use of Hg in human and animal rabie vaccine.																														
6.b. traditional medicine	-	-	There is not a formal register of this use.																														
6.c. ritual and cultural uses	-	-	There is not a formal register of this use.																														
6.d. soaps/baby powder/skin lightening creams	-	-	Regulation from Sanitary Vigilance (Resolução RDC nº 48) prohibits the use of Hg in cosmetics, hygienic products and perfums.																														
6.e. paints	No information	No information	No information																														

6. f. biocides/pesticides (except for in paints)	-	-	Use of ethylmercury and methylmercury is prohibited in pesticides by Agricultural Ministry Regulation since 1975 (Portaria nº 02/75)																		
6.g. others (specify)																					
<b>B. Processes using mercury</b>																					
1. chlor alkali production	<ul style="list-style-type: none"> <li>8 (eight) Chlor-alkali plants</li> </ul> <table border="1"> <thead> <tr> <th colspan="3">Chlorine (ton)</th> </tr> <tr> <th></th> <th>Importation (10<sup>3</sup>ton)</th> <th>Production (10<sup>3</sup> ton)</th> </tr> </thead> <tbody> <tr> <td>2003</td> <td>3.9</td> <td>1,099</td> </tr> <tr> <td>2004</td> <td>3.5</td> <td>1,174</td> </tr> <tr> <td>2005</td> <td>3.4</td> <td>1,226</td> </tr> <tr> <td>2006</td> <td>3.9</td> <td>1,223</td> </tr> </tbody> </table> <p><b>Soda Production using Mercury process (ton):</b>  2003 – 274.8  2004 – 299.2  2005 – 313.8  2006 – 296.9  Source: www.abiclor.com.br</p>	Chlorine (ton)				Importation (10 <sup>3</sup> ton)	Production (10 <sup>3</sup> ton)	2003	3.9	1,099	2004	3.5	1,174	2005	3.4	1,226	2006	3.9	1,223	2	Law related to chlorine production (Law nº 9.976/2000). New plants production: Prohibited chlorine production using mercury cells and asbestos diaphragms.
Chlorine (ton)																					
	Importation (10 <sup>3</sup> ton)	Production (10 <sup>3</sup> ton)																			
2003	3.9	1,099																			
2004	3.5	1,174																			
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2006	3.9	1,223																			
2. small scale/artisanal gold mining	Only preliminary data – Difficult to confirm. Under assessment.	1	Mercury use is permitted only in licensed (authorized) mining.																		
3. vinyl chloride monomer production	Ethylene co-polymers/monomers and others (primary forms). <table border="1"> <thead> <tr> <th></th> <th>Import (ton)</th> <th>Export (ton)</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>1.299</td> <td>85</td> </tr> <tr> <td>2006</td> <td>610</td> <td>1</td> </tr> </tbody> </table>		Import (ton)	Export (ton)	2005	1.299	85	2006	610	1	No information										
	Import (ton)	Export (ton)																			
2005	1.299	85																			
2006	610	1																			

	2007	811	0,2		
Source: www.desenvolvimento.gov.br/aliceweb, in april 2008. This information does not mean that all of this product is vinyl chloride <b>No information related to production.</b>					

**C. Other relevant information: mercury in products and processes in your country**

This table presents information related to production, import and export of products that **could** contain mercury, but do not indicate that all of this products contain mercury.

In relation to the process (chlor-alkali), we are informing the production of chlorine, not the amount of mercury in use. It is the same for vinyl chloride, in this case we are informing the sum of import/export of monomers and polymers of ethylene, not the amount of mercury in use in this activity.

**Please send the above requested information to**

UNEP Chemicals Or by fax : 41 22 7973460 11-13, chemin des Anémones CH-1219 Châtelaine Geneva, Switzerland	Or by email : mercury@chemicals.unep.ch	For queries, please contact : +41 22 9178865
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