

## Chapter 2: Chemical Production, Import, Export and Use

### [2.1 Chemical Production, Import and Export](#)

### [2.2 Chemical Use by Categories](#)

### [2.3 Chemical Waste](#)

### **2.1 Chemical Production, Import and Export**

(Source of data is statistical yearbook for year June 2003- CAPMAS)

The production and import of chemicals for local use are considered to be high quantities compared to Export . Table 2.A: shows Chemical production ton/ year.

**Table 2-A:** Chemical Production, Import and Export in year 2000.

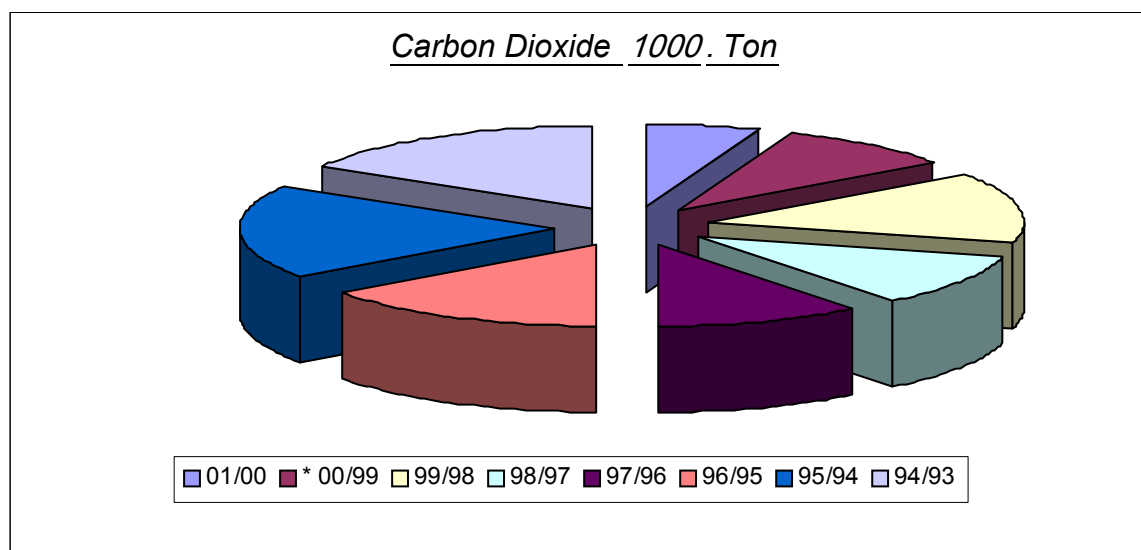
<i>Chemical Category</i>	<i>Import</i>		<i>Export</i>	
	<i>Quantity</i>	<i>Value</i>	<i>Quantity</i>	<i>Value</i>
Fertilizers	2770294	154717	638257	270784
Petroleum products	3600004	3579987	7461566	589534
Industrial (used in manufacturing/processing facilities)	Not available	Not available	Not available	Not available
<b>Total</b>	<b>3870298</b>	<b>3734704</b>	<b>8099823</b>	<b>860318</b>

*Imports and Exports are for all sectors (Governmental, private investment)*

**Table 2-B:** Some Chemical Industries Production, by product (Source of data is statistical yearbook for year June 2003- CAPMAS)

<i>Product</i>	<i>Unit</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>
Carbon Dioxide	1000 Ton	5	9	12	9
Tanned Leather	Mill. L.E.	943	868	874	898
Glue	1000 Ton	42	40	39	35
Ferro silicon (75%)	Ton	52923	54769	60655	56703
Tyres, outer	1000.Tyre	1250	1037	1426	1498
Tubes, inner	1000.Tube	1081	1626	2172	2004
Soap	1000 Ton	134	216	224	224
Glycerin	Ton	1493	2869	2884	2884
Detergents	1000 Ton	238	556	530	382
Caustic Soda	1000 Ton	73	44	58	68
Paper & Cartoon	1000 Ton	1874	1829	547	785
Super Phosphate	1000 Ton	1018	1151	1269	1373
Cigarettes	Milliard	65	62	59	57

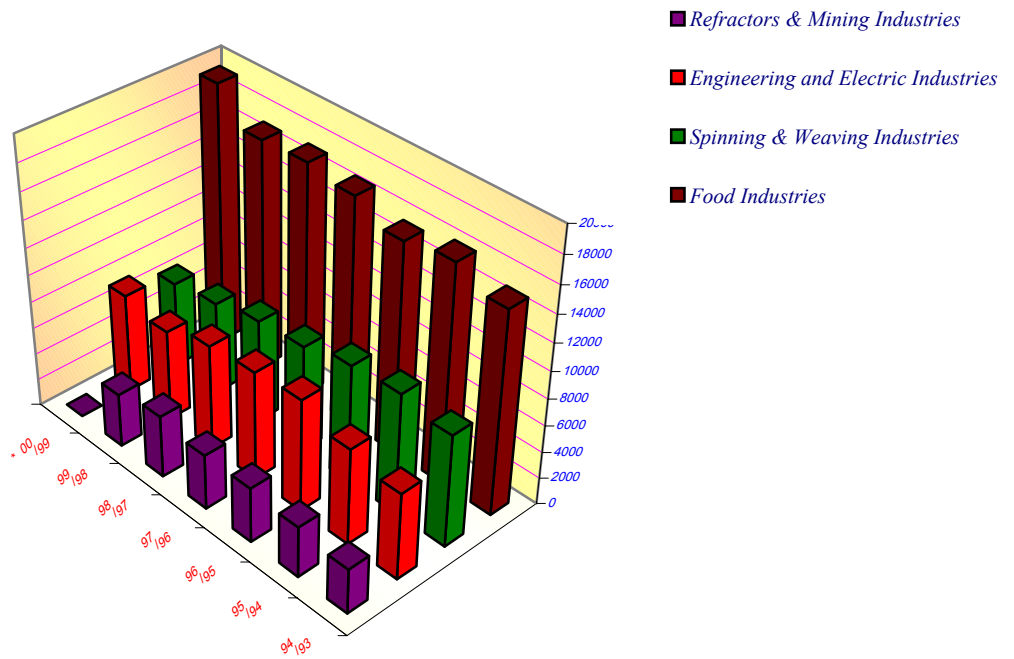
Tobacco Products	Ton	60900	56595	58283	54997
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**Table 2-C: Value of Some Industrial Production <sup>(1)</sup> (In mill. L.E.)**

<i>Sector</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>	<i>97/96</i>
Food, Beverage & Tobacco Industries	23351	20434	18959	19140	18018
Mining & Quarries	320	320	360	344	325
Spinning & Weaving	7015	10095	8391	9421	7221
Wood Products	342	541	730	475	413
Paper & Chemicals	9844	9841	10787	10087	8285
Pharmaceutical, Drugs & Medical Supplies	4476	4257	3424	3425	3171
Refractories	6640	6247	6550	6198	5092
Metal products	9412	8771	7161	5796	5051
Engineering Industries	7782	7894	7459	7895	4977
Electrical Industries	2464	3313	3782	3161	2330
<b>Total</b>	<b>71646</b>	<b>71713</b>	<b>67603</b>	<b>65942</b>	<b>54883</b>

*(1) Excludes governmental workshops, military factories, ginning and grinding industries, bakery, tea packing, press and publishing.*



**Table 2-D:** Some Mining Production, by Type of Product

<i>Product</i>	<i>Unit</i>	<i>02/01</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>
Phosphate	1000 Ton	1641	1295	1177	1165	1059
Iron ore	1000 Ton	*2399	3226	2932	3002	3001
Salt (common)	1000 Ton	1381**	2578	1990	2588	2488
Kaolin	1000 Ton	125	226	205	314	286
Quartz	1000 Ton	103	69	63	103	94

- Excluding North Sinai production
- Only public sector

**Table 2-E: Some Food Industries Production, by Product**

<i>Product</i>	<i>Unit</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>
Glucose	1000 Ton	72	76	62	45
Chocolate	Ton	15613	29208	24629	23741
Vegetables Preserved	Ton	12311	15901	15437	16089
Tomato Paste (canned)	Ton	17909	18323	8056	6864
Yeast	Ton	22370	24380	29088	31126
Starch	1000 Ton	27	27	35	37
Cotton Seed Oil	1000 Ton	352	394	394	390
Molasses	1000 Ton	584	520	475	474
Cigarettes	Milliard	65	62	59	51
Tobacco Products	Ton	60900	56595	58283	54997
White Cheese	1000 Ton	312	287	289	281
Processed Cheese	1000 Ton	32	38	28	20
Pasteurized Milk	1000 Ton	58	53	22	24
Hydrogenated Oils	1000 Ton	309	342	261	268

**Table 2-F: Some Spinning and Weaving Production, by Product**

<i>Product</i>	<i>Unit</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>
Cotton Textiles	Mill. L.E.	1218	1559	1524	1559
Wool Yarn	1000 Ton	19	18	12	14
Wool Textiles	Mill.M	5	9	10	11
Textiles from Silk	Mill. L.E.	338	368	263	258
Jute Yarn	1000 Ton	1	5	10	15
Jute Textiles	1000 Ton	2	4	9	13

Blankets & Rugs	Mill. L.E.	419	1007	949	989
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**Table 2-G: Exports, by Items Exported (In thousand L.E.)**

<i>Item</i>	<i>2002</i>	<i>2001</i>	<i>2000</i>	<i>1999</i>	<i>1998</i>
Fats, oils, and related products	66030	71145	82907	97374	24270
Prepared foodstuffs, beverages and tobacco	333088	267329	199839	120122	112776
Mineral products	7697812	6880248	7008325	4514877	333635 3
Chemical products	1188230	1109409	1024192	781389	881817
Artificial resins and plastic materials, cellulose and rubber	416991	467699	296542	405156	156596
Raw hides, skins, furs and fur products	121917	100509	79186	46969	59231
Paper, paperboard, paper-making materials, and related articles	144664	147198	90368	80654	89447
Textiles and textile articles	3622866	2880882	3242643	3035427	327204 7
Footwear, headgear, umbrellas, and artificial flowers	6019	6762	58924	30445	23071
Products of stone, cement, asbestos, and glass	1087239	387452	1375232	351373	260792
Pearls, precious semiprecious stones, costume jewelers, and coins	658263	42606	3353	2663	2240
Base metals and related products	1812416	1230390	1066077	790411	981252
Machinery and mechanical and electrical appliances	272049	192614	161866	124163	76680
Vehicle, aircraft, and related parts	30159	20754	16046	22448	77476
Optical, cinematographic, surgical instruments and watches	7987	8271	7118	6533	9466

**Table 2-H: Imports by Items Imported**  
(In thousand. L.E.)

<i>Item</i>	<i>2002</i>	<i>2001</i>	<i>2000</i>	<i>1999</i>	<i>1998</i>
Fats, oils, and related products	817948	697237	1050461	142619 7	1833244
Prepared foodstuffs, beverages and tobacco	3644604	3399587	2638041	276489 3	2805049
Mineral products	2860544	3074660	4471032	484689 6	4098470
Chemical products	5669388	4620392	3971241	445587 3	4380969
Artificial resins and plastic materials, cellulose and rubber	2664929	2655644	2685415	291479 0	2693460
Raw hides, skins, furs and fur products	76014	67645	51922	36129	22232
Paper, paperboard, paper-making materials, and related articles	1287110	1503572	1220052	171316 4	192124 6
Textiles and textile articles	1110529	1064770	992177	146140 8	173357 6
Footwear, headgear, umbrellas, and artificial flowers	139624	118417	127113	134573	82789
Products of stone, cement, asbestos, and glass	630511	525602	587269	570913	565885
Pearls, precious semiprecious stones, costume jewellery, and coins	13222	111397	58541	183211	242658
Base metals and related products	5238543	4910708	4136795	524991 0	585748 3
Machinery and mechanical and electrical appliances	9594046	9743296	10783751	119978 56	121468 12
Vehicle, aircraft, and related parts	1585027	1588406	1927221	220079 0	250422 9
Optical, cinematographic, surgical instruments and watches	1193520	10558999	952151	106533 0	120856 9

**Table 2-I:** Exports of most important, by Commodity  
(In thousand L.E.)

<i>Item</i>	<i>2002</i>	<i>2001</i>	<i>2000</i>	<i>1999</i>	<i>1998</i>
Petroleum oil, crude	1425238	1178408	1208465	998709	550704
Cotton, raw	1490235	740756	672905	816086	537774
Cotton, yarn	485125	486364	515504	420837	766958
Cotton, fabrics	122259	145807	182533	118033	184468
Clothing, manufactured	936380	947367	1089181	947600	1133108
Petroleum shale oils other than crude	5314280	4971737	5393518	1608114	1314378
Sugar cane, refined	139	15546	29	18	615
Aluminum bars, rods, angle shapes, and sections	21238	63835	40285	13752	20007

**Table 2-J:** Imports of Most important, by Commodity  
(In thousand. L.E.)

<i>Item</i>	<i>2002</i>	<i>2001</i>	<i>2000</i>	<i>1999</i>	<i>1998</i>
Sugar refined	252426	226865	28564	191906	331639
Organic and inorganic chemicals	1951579	1708616	1570875	1583216	1531870
Cement	49529	126472	282940	701039	462854

## ***2.2 Chemical use and regulatory structure by categories***

Pesticides are mostly imported as technical material and formulated in the country. Pesticides used in Egypt are regulated by Agricultural Law No. 53 that was issued in 1966, as well as the Ministerial Decrees issued after that an interagency Pesticides



Committee, under the umbrella of the Ministry of Agriculture has been formed which is responsible for pesticide registration and licensing of imports. Before registration a pesticide is evaluated for efficacy for three successive years. At the time of registration it is examined for chemical and physical properties The Central Agricultural Pesticides Laboratory (CAPL) regulates pesticides through its enforcement system and penalizes violators.

There is an "Association for Agrochemical Producers and Affiliates" in the country, but there is no NGO s involved with pesticides.

### ***2.3 Chemical Waste***

Large amounts of chemical waste are generated during manufacturing processes.

The main categories of waste generated in different industrial sectors are summarized in Table 2-K.

**Table 2-K: Chemical Waste Generation types.**

<b><i>Nature of Industry</i></b>	<b><i>Type of Chemical Waste</i></b>
Industrial Governmental Sector	Various due to verities of emission released as example : Mercury Lead Chromium Cadmium Copper
Paper Industries	Organic &Inks
Engineering Industries	Sludge
Mineral Industries	Sludge
Electroplating Industry	Grease and oil product Sludge
Pesticides Manufacturing	Volatile organic compounds Particulate matter Sludge Spent catalysts Container residues Cyanide and heavy metals
Pharmaceutical Industry	Sludge Spent catalysts Spent solvents Toxic organic
Dairy Industry	Dissolved sugars and proteins

	Residues of additives
Textiles Industry	Heavy metals Phthalates

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### [2.2 Chemical Use by Categories](#)

### [2.3 Chemical Waste](#)

### **2.1 Chemical Production, Import and Export**

(Source of data is statistical yearbook for year June 2003- CAPMAS)

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**Table 2-A:** Chemical Production, Import and Export in year 2000.

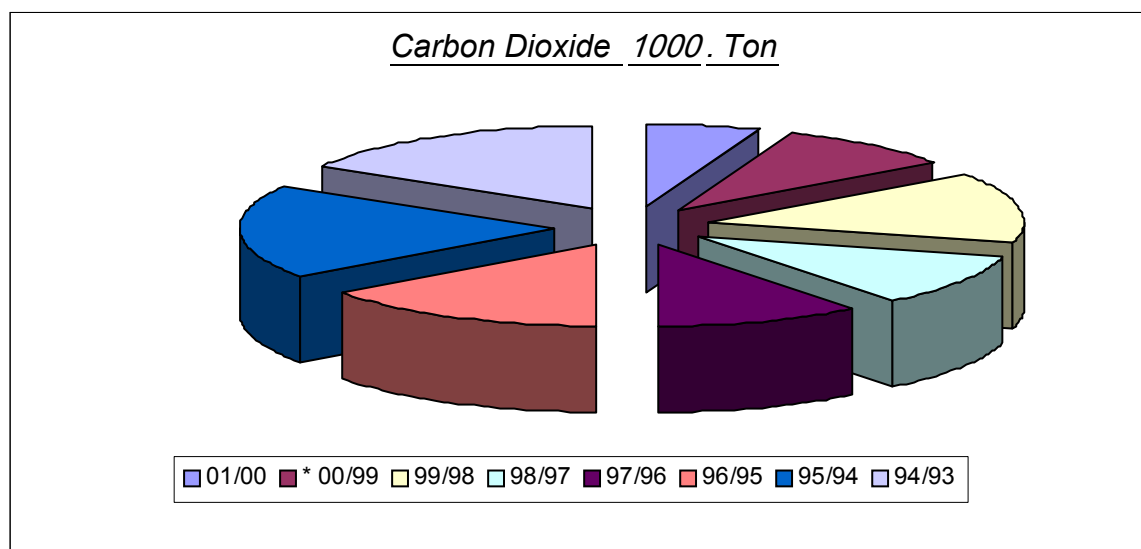
<i>Chemical Category</i>	<i>Import</i>		<i>Export</i>	
	<i>Quantity</i>	<i>Value</i>	<i>Quantity</i>	<i>Value</i>
Fertilizers	2770294	154717	638257	270784
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**Table 2-B:** Some Chemical Industries Production, by product (Source of data is statistical yearbook for year June 2003- CAPMAS)

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Soap	1000 Ton	134	216	224	224
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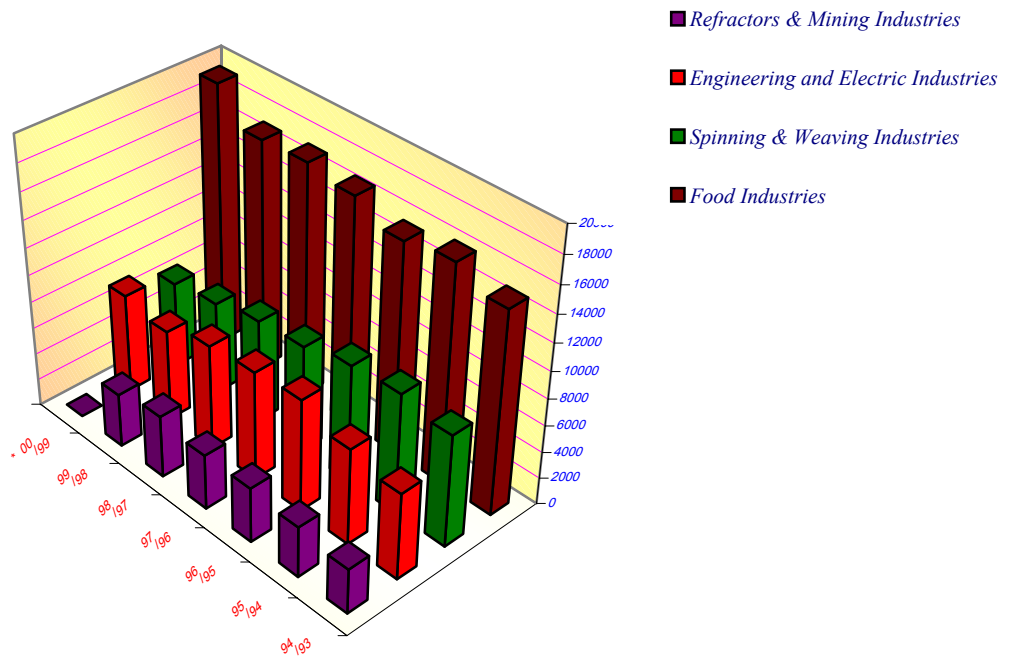


**Table 2-C: Value of Some Industrial Production <sup>(1)</sup> (In mill. L.E.)**

<i>Sector</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>	<i>97/96</i>
Food, Beverage & Tobacco Industries	23351	20434	18959	19140	18018
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Spinning & Weaving	7015	10095	8391	9421	7221
Wood Products	342	541	730	475	413
Paper & Chemicals	9844	9841	10787	10087	8285
Pharmaceutical,					

Drugs & Medical Supplies	4476	4257	3424	3425	3171
Refractories	6640	6247	6550	6198	5092
Metal products	9412	8771	7161	5796	5051
Engineering Industries	7782	7894	7459	7895	4977
Electrical Industries	2464	3313	3782	3161	2330
Total	71646	71713	67603	65942	54883

***(2) Excludes governmental workshops, military factories, ginning and grinding industries, bakery, tea packing, press and publishing.***



**Table 2-D:** Some Mining Production, by Type of Product

<i>Product</i>	<i>Unit</i>	<i>02/01</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>
Phosphate	1000 Ton	1641	1295	1177	1165	1059
Iron ore	1000 Ton	*2399	3226	2932	3002	3001
Salt (common)	1000 Ton	1381**	2578	1990	2588	2488
Kaolin	1000 Ton	125	226	205	314	286
Quartz	1000 Ton	103	69	63	103	94

- Excluding North Sinai production
- Only public sector

**Table 2-E: Some Food Industries Production, by Product**

<i>Product</i>	<i>Unit</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>
Glucose	1000 Ton	72	76	62	45
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**Table 2-F: Some Spinning and Weaving Production, by Product**

<i>Product</i>	<i>Unit</i>	<i>01/00</i>	<i>00/99</i>	<i>99/98</i>	<i>98/97</i>
Cotton Textiles	Mill. L.E.	1218	1559	1524	1559
Wool Yarn	1000 Ton	19	18	12	14
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Blankets & Rugs	Mill. L.E.	419	1007	949	989
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**Table 2-G: Exports, by Items Exported (In thousand L.E.)**

<i>Item</i>	<i>2002</i>	<i>2001</i>	<i>2000</i>	<i>1999</i>	<i>1998</i>
Fats, oils, and related products	66030	71145	82907	97374	24270
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Raw hides, skins, furs and fur products	121917	100509	79186	46969	59231
Paper, paperboard, paper-making materials, and related articles	144664	147198	90368	80654	89447
Textiles and textile articles	3622866	2880882	3242643	3035427	327204 7
Footwear, headgear, umbrellas, and artificial flowers	6019	6762	58924	30445	23071
Products of stone, cement, asbestos, and glass	1087239	387452	1375232	351373	260792
Pearls, precious semiprecious stones, costume jewelers, and coins	658263	42606	3353	2663	2240
Base metals and related products	1812416	1230390	1066077	790411	981252
Machinery and mechanical and electrical appliances	272049	192614	161866	124163	76680
Vehicle, aircraft, and related parts	30159	20754	16046	22448	77476
Optical, cinematographic, surgical instruments and watches	7987	8271	7118	6533	9466

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(In thousand. L.E.)

<i>Item</i>	<i>2002</i>	<i>2001</i>	<i>2000</i>	<i>1999</i>	<i>1998</i>
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Optical, cinematographic, surgical instruments and watches	1193520	10558999	952151	106533 0	120856 9



**Table 2-I:** Exports of most important, by Commodity  
(In thousand L.E.)

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### ***2.3 Chemical Waste***

Large amounts of chemical waste are generated during manufacturing processes.

The main categories of waste generated in different industrial sectors are summarized in Table 2-K.

**Table 2-K: Chemical Waste Generation types.**

<b><i>Nature of Industry</i></b>	<b><i>Type of Chemical Waste</i></b>
Industrial Governmental Sector	Various due to verities of emission released as example : Mercury Lead Chromium Cadmium Copper
Paper Industries	Organic &Inks
Engineering Industries	Sludge
Mineral Industries	Sludge
Electroplating Industry	Grease and oil product Sludge
Pesticides Manufacturing	Volatile organic compounds Particulate matter Sludge Spent catalysts Container residues Cyanide and heavy metals
Pharmaceutical Industry	Sludge Spent catalysts Spent solvents Toxic organic
Dairy Industry	Dissolved sugars and proteins

	Residues of additives
Textiles Industry	Heavy metals Phthalates