

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,
CANBERRA.
OFFICIAL STATISTICS, COMMONWEALTH OF AUSTRALIA.

MANUFACTURING INDUSTRIES
1949-50

NO. 3. CHEMICALS, DRUGS AND MEDICINES

Prepared Under Instruction from
THE RIGHT HONORABLE THE TREASURER,

by

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5/11/51

PREFACE

1. GENERAL: The industries included in the series for 1949-50 are listed on the back of the cover, and are the same as those covered by the 1948-49 series. The 1949-50 summaries published to date are indicated at the top of page 2.
2. CLASSIFICATION OF FACTORIES: For purposes of industry classification, a factory in Australia is classified according to the nature of the product. Where two or more distinct types of industrial activity are carried on in one establishment, a separate return is obtained, wherever practicable, for each activity in order to allow classification on this basis. In cases where this is not practicable, there is no alternative but to classify the factory according to its predominant activity. This difficulty is most acute in the Metal Trades industries, (e.g. Engineering firms also producing Agricultural Implements, Stoves and Ovens, and/or Brass and Copper products), but it is also to be found in factories concerned with the treatment or manufacture of Skins, Leather, Clothing, Wood products and some other articles.

Each of the summaries in the series "Manufacturing Industries", relates as far as possible to the operations of factories classified to the industry specified. Sometimes articles applicable to this industry are also produced, as subsidiary production, in other industries, and, wherever possible, quantity tables have been extended to show details of production separately for the industry under review and the total in all industries.

3. BASIS OF THE STATISTICS: The scope of the factory statistics is fully explained in Part I of the annual Production Bulletin.

Briefly, a "factory" is taken to be a manufacturing establishment in which four or more hands are employed or in which power other than hand is used.

All persons employed in the manufacturing activities of the factory are counted as factory employees. The figures relating to employment, therefore, exclude all those engaged in selling and distribution, such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods, and retailing storemen. The figures do include, however, proprietors who work in their own factories as well as "out-workers".

The value of output is the wholesale selling value at the factory of goods made or processed during the year, including by-products. In addition it includes the value of other work done, such as repair work, assembling and making-up for customers.

The value of production is the value of output minus the cost of raw materials, containers, power, fuel, light, lubricants, water, tools replaced, and repairs to plant, and represents the value added in the process of manufacture within the factories. As full details of the cost of production are not collected, the amount of profit resulting from operations cannot be ascertained. The value of production, therefore, is the source from which such items as wages, interest, depreciation, profits, taxation, insurance, advertising and other sundry charges are met.

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MANUFACTURING INDUSTRIES : AUSTRALIA, 1949-50

NOTE:- Summaries already published in this Series are:- Nos. 1. Cement and Cement Goods; 2. Bricks, Tiles, Pottery and Earthenware; 4. White Lead, Paints and Varnish, 5. Chemical Fertilizers; 7. Industrial Metals - Ferrous - Parts I to IV; 8. Industrial Metals - Non-Ferrous - Parts I and II; 9. Electrical Machinery and Equipment; 10. Motor Vehicles and Cycles; 11. Agricultural Implements; 12. Wireless Apparatus; 13. Stoves, Ovens and Ranges; 16. Tanneries; 17. Boots and Shoes; 19. Flour and Other Grain Mills; 20. Biscuits; 21. Confectionery; 22. Jam, Fruit and Vegetable Canning; 23. Pickles, Sauces, Condiments, Coffee, Spices, etc.; 26. Breweries; 27. Tobacco, Cigars and Cigarettes; 28. Sawmilling; 29. Rope and Cordage; 30. Rubber Works; 32. Electric Light and Power Works; 33. Gas works; 35. Paper Mills; 36. Wineries and Distilleries; 37. Aerated Waters and Cordials; 39. Wire and Wire Working (Including Nails).

CHEMICALS, DRUGS AND MEDICINES

1. **GENERAL:** In 1945-46, the classification of factories in use in Australia was amended to provide for the separate tabulation of statistics relating to factories engaged in the production of Industrial and Heavy Chemicals and Acids and those producing Pharmaceutical and Toilet Preparations which, previously, had been combined.

It should be noted that the particulars in this Summary relating to Industrial and Heavy Chemicals and Acids include details for the explosives industry in all tables except those covering details of materials used and articles produced. This action is necessary in order to avoid the publication of information which must be treated as confidential.

2. **SUMMARY OF STATISTICS:** In the following table, a summary of the principal statistics of factories engaged in the production of Industrial and Heavy Chemicals and Acids (including Explosives), and Pharmaceutical and Toilet Preparations is given for the years 1938-39, 1945-46 and 1947-48 to 1949-50. Separate details for the two industries are not available prior to 1945-46.

TABLE I : CHEMICALS, DRUGS AND MEDICINES (INCLUDING EXPLOSIVES):

AUSTRALIA

Year	Number of Factories	Persons Employed (c)	Salaries & Wages Paid (b) (£'000)	Power, Fuel and Light, etc. Used (£'000)	Value of Materials etc., Used (c) (£'000)	Value of Production (d) (£'000)	Value of Output (£'000)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(i) Total Chemicals, Drugs and Medicines (incl. Explosives)							
1938-39	250	8,100	1,592	171	4,195	4,640	9,006
1945-46	380	15,742	4,728	875	11,410	11,417	22,502
1947-48	395	14,392	5,169	822	13,614	12,434	26,870
1948-49	408	14,611	5,944	977	15,441	13,738	30,156
1949-50	404	14,906	6,730	1,137	16,893	15,541	33,671
(ii) Industrial and Heavy Chemicals and Acids (incl. Explosives)							
1938-39	(e)	(e)	(e)	(e)	(e)	(e)	(e)
1945-46	165	10,228	3,450	618	6,007	6,627	13,252
1947-48	182	8,901	3,614	760	7,863	6,859	15,512
1948-49	192	9,137	4,143	908	9,027	7,887	17,322
1949-50	199	9,749	4,890	1,064	10,522	9,075	20,661
(iii) Pharmaceutical and Toilet Preparations							
1938-39	(e)	(e)	(e)	(e)	(e)	(e)	(e)
1945-46	215	5,514	1,278	57	5,403	4,790	10,250
1947-48	213	5,491	1,555	62	5,751	5,545	11,358
1948-49	216	5,474	1,801	69	6,414	5,851	12,334
1949-50	205	5,157	1,840	73	6,371	6,566	13,010

- (a) Includes Working Proprietors. (b) Excludes amounts drawn by Working Proprietors.
 (c) Includes also containers, packing, etc. replacements of tools and repairs to plant.
 (d) Value of Production equals column (7) less total of columns (4) and (5).
 (e) Separate details not available.

In the next table, particulars for Industrial and Heavy Chemicals and Acids (including Explosives) are given for each State during the year 1949-50.

TABLE II : INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPLOSIVES) :

STATES, 1949-50

Particulars	N.S.W.	VIC.	Q'LD.	S.A.	W.A.	TAS.	AUSTRALIA
Number of Factories	101	66	17	7	7	1	199
Number Employed (a) -							
Males	3,215	3,679	(o)	1,125	(o)	(o)	8,412
Females	314	838	(o)	117	(o)	(o)	1,337
Total	3,529	4,517	(o)	1,242	(o)	(o)	9,749
	£.	£.	£.	£.	£.	£.	£.
Value of -							
Salaries & Wages Paid (b)	1,860,671	2,233,047	(c)	601,973	(o)	(o)	4,802,242
Power, Fuel and Light, etc. used	445,264	336,737	(o)	215,297	(o)	(o)	1,063,924
Materials, etc. used	5,671,514	4,152,578	(o)	348,199	(o)	(o)	10,521,896
Production	4,224,125	3,609,665	(o)	858,881	(o)	(o)	9,075,117
Output	10,340,903	8,098,980	(o)	1,423,077	(o)	(o)	20,660,937
Land and Buildings	1,779,755	3,920,906	(o)	4,828,712	(o)	(o)	10,695,857
Plant and Machinery	2,597,050	4,890,763	(o)	1,863,026	(o)	(o)	9,707,749
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
H.P. of Engines ordinarily in use	23,702	39,746	(c)	5,360	(o)	(o)	72,183

- (a) Includes Working Proprietors. (b) Excludes amounts drawn by Working Proprietors.
 (c) Not available for publication; included with total for Australia.

In Table III similar particulars are given for the Industry - Pharmaceutical and Toilet Preparations - for the year 1949-50.

TABLE III : PHARMACEUTICAL AND TOILET PREPARATIONS : STATES, 1949-50

Particulars	N.S.W.	VIC.	Q'LD.	S.A.	W.A.	TAS.	AUSTRALIA
Number of Factories	130	49	5	11	7	3	205
Number Employed (a) -							
Males	1,072	685	37	(o)	(o)	(o)	2,121
Females	1,902	769	50	(o)	(o)	(o)	3,036
Total	2,974	1,454	87	(o)	(o)	(o)	5,157
	£.	£.	£.	£.	£.	£.	£.
Value of -							
Salaries and Wages Paid (b)	1,052,811	546,407	29,267	(o)	(o)	(o)	1,839,900
Power, Fuel and Light etc. used	30,036	23,555	1,078	(o)	(o)	(o)	72,690
Materials, etc., used	3,383,631	2,239,114	85,506	(o)	(o)	(o)	6,370,831
Production	4,503,559	1,702,502	42,174	(o)	(o)	(o)	6,566,436
Output	7,917,226	3,965,171	128,758	(o)	(o)	(o)	13,009,957
Land and Buildings	1,040,303	469,583	18,542	(o)	(o)	(o)	1,705,906
Plant and Machinery	373,283	309,519	4,636	(o)	(o)	(o)	767,208
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
H.P. of Engines ordinarily in use	3,364	2,761	117	(c)	(o)	(o)	7,816

- (a) Includes Working Proprietors. (b) Excludes amounts drawn by Working Proprietors.
 (c) Not available for publication; included with total for Australia.

3. **AVERAGE SALARIES, OUTPUT AND PRODUCTION:** Particulars of average salary and wage paid, together with average values of output and production per person engaged and the ratio of salaries and wages paid to the value of production, are shown in the following table for the combined industrial group - Chemicals, Drugs and Medicines (including Explosives) - for the years 1938-39, 1945-46 and 1947-48 to 1949-50.

TABLE IV : AVERAGE SALARIES AND WAGES PAID, OUTPUT, ETC. PER EMPLOYEE : AUSTRALIA

Year	Salaries and Wages per Employee (a)	Value of Output per Person Engaged (b)	Value of Production per Person Engaged (b)	Ratio per cent. of Salaries and Wages to Value of Production
	£.	£.	£.	%
1938-39	199	1,112	573	34.31
1945-46	303	1,493	725	41.42
1947-48	362	1,867	864	41.57
1948-49	410	2,064	946	43.27
1949-50	455	2,259	1,049	43.03

(a) Excludes Working Proprietors and amounts drawn by them. (b) Includes Working Proprietors.

4. MATERIALS USED AND ARTICLES PRODUCED: The two tables following show particulars of the quantity and value of the principal materials used and articles produced in each of the industries, Industrial and Heavy Chemicals and Acids, and Pharmaceutical and Toilet Preparations during the year 1949-50. A number of the articles produced in establishments classified for statistical purposes as Industrial and Heavy Chemicals and Acids and Pharmaceutical and Toilet Preparations factories are, however, also produced in other establishments, and Table VI accordingly shows separate particulars of these articles produced in (i) Industrial and Heavy Chemicals and Acids, and Pharmaceutical and Toilet Preparations factories, and (ii) all factories (including Industrial and Heavy Chemicals and Acids, and Pharmaceutical and Toilet Preparations factories).

TABLE V : PRINCIPAL MATERIALS USED IN THE INDUSTRIAL GROUP -
CHEMICALS, DRUGS AND MEDICINES : AUSTRALIA, 1949-50

Materials Used	Industrial and Heavy Chemicals and Acids		Materials Used	Pharmaceutical and Toilet Preparations	
	Quantity	Value		Quantity	Value
	Ton	£.		cwt.	£.
Limestone	74,158	95,226	Acetylsalicylic Acid	6,037	150,678
Coke	(a)	(a)	Acid - Sulphuric (100%)	10,434	7,218
Sulphur	23,771	330,671	Alkali - for Soap and Other Purposes	2,048	4,882
Diatomaceous Earth	330	7,940		pf. gals.	
Olefine	769	71,740	Alcohol	176,594	89,582
	gallons			oz.	
Phenol	376,234	311,932	Alkaloids	159,372	77,175
	pf. gals.			gals.	
Alcohol	505,790	81,642	Phenol	1,927	1,508
	cwt.			tons	
Salt	1,767,237	140,387	Sulphur	151	4,352
Sugar, Refined	2,700	5,420		lb.	
Glycerine - Purchased			Sulpha Compounds	34,032	119,302
Refined	9,214	77,985		cwt.	
Crude	(a)	(a)	Soda Ash - for making Soap & Soda Crystals	408	424
- Own Manuf.	-	-	Calcium Carbonate	8,616	16,613
Refined	(a)	(a)	Salts - Ammonium	453	2,699
Crude	54,932	92,048	Bismuth	93	10,230
Tallow			Magnesium	5,133	25,595
Soda Ash -			Potassium	953	17,438
for making Soap	(c)	(c)	Sodium	10,869	34,742
" " Soda				39	163
Crystals	7,407	7,393	Lard	lb.	
Resin	3,701	13,627		lb.	
	lb.		Wool Grease	104,685	6,005
Wool Grease	30,370	1,240		cwt.	
Oils - Essential	425,357	127,697	Glycerine -		
	gals.		Refined	8,960	76,878
Fixed	424,175	279,828	Crude	(a)	(a)
	cwt.			lb.	
Sulphuric Acid	234,512	132,160	Oils - Essential	427,513	205,754
Stearine	3,119	4,659		cwt.	
Salts - Ammonium	19,347	17,226	Fixed - Coconut	844	5,520
Magnesium	2,019	4,651		gals.	
Potassium	6,713	15,702			
Sodium	13,875	24,974	Other	116,894	105,722

**TABLE V : PRINCIPAL MATERIALS USED IN THE INDUSTRIAL GROUP -
CHEMICALS, DRUGS AND MEDICINES : AUSTRALIA, 1949-50 (Cont)**

Materials Used	Industrial and Heavy Chemicals and Acids		Materials Used	Pharmaceutical and Toilet Preparations	
	Quantity	Value		quantity	Value
	cwt.			cwt.	
Calcium Carbonate	10,211	2,313	Stearine	2,339	11,104
			Salt	1,294	585
			Sugar	25,120	51,535

(a) Details not available for publication.

**TABLE VI - PRINCIPAL ARTICLES PRODUCED IN THE INDUSTRIAL GROUP -
CHEMICALS, DRUGS AND MEDICINES : AUSTRALIA, 1949-50**

(1) Products of Industrial and Heavy Chemicals and Acids Industry.

Articles Produced	Unit of Qty.	Industrial and Heavy Chemicals and Acids Factories		All Factories (incl. Industrial and Heavy Chemicals and Acids)	
		Quantity	Value	Quantity	Value
			£.		£.
Acid - Hydrochloric -					
for sale	ton	3,279	62,801	3,442	72,081
for use in own works	"	137	(a)	137	(a)
Nitric	"	(b) 6,253	160,292	(b) 6,361	167,899
Sulphuric - for sale	"	59,593	493,119	100,853	861,993
- for use in own works	"		-		
Ammonia - Anhydrous	"	1,450	130,353	1,450	130,353
Aqua	lb.	3,639,431	57,905	3,639,431	57,905
Carbon Dioxide - Dry Ice	ton	4,714	137,320	4,714	137,320
Gas	lb.	9,504,223	145,152	13,677,038	224,732
Chlorine	ton	(c)	(c)	(c)	(c)
Sodium Hydroxide	"	11,613	360,975	11,613	360,975
Sulphate	"	(a) 7,131	(a) 81,877	7,131	81,877
Hypochlorite	gal.	412,732	48,273	412,732	48,273
Zinc Chloride	ton	205	9,840	205	9,840
Essences, Flavouring -					
for Industrial Use	gal.	334,433	413,802	489,543	682,451
for Domestic Use	"			102,443	309,566
Disinfectants	-	(e)	242,660	(e)	564,579
Insecticides and Vermin Sprays	-	(e)	1,366,814	(e)	1,584,621
Weed Killers	-	(e)	272,568	(e)	263,797

(a) Quantity only available. (b) Includes production for use in own works.

(c) Not available for publication. (d) Includes particulars of articles produced in other works, details of which are not available for separate publication.

(e) Value only available.

TABLE VI - PRINCIPAL ARTICLES PRODUCED IN THE INDUSTRIAL GROUP -
CHEMICALS, DRUGS AND MEDICINES : AUSTRALIA, 1949-50

(CONTINUED)

(ii) Products of Pharmaceutical and Toilet Preparations Industry

Articles Produced	Unit of Qty.	Pharmaceutical and Toilet Preparations Factories		All Factories (incl. Pharmaceutical and Toilet Preparations)	
		Quantity	Value	Quantity	Value
			£.		£.
<u>Pharmaceutical Products -</u>					
Proprietary Medicines -					
Liquids	-	(a)	2,739,766	(a)	2,797,133
Ointments	-	(a)	(b) 314,745	(a)	314,745
Pills, Tablets, etc.	-	(a)	(b) 2,135,048	(a)	2,135,048
Powders	-	(a)	876,917	(a)	876,917
Galencicals - Liquid, Semi-Liquid and Powders	-	(a)	(b) 593,322	(a)	593,322
<u>Toilet Preparations -</u>					
Cosmetic Creams and Lotions -					
Face Creams	cwt.	(b) 4,136	(b) 222,662	4,136	222,662
Hand Lotions	"	(b) 2,251	(b) 77,745	2,251	77,745
Other Skin Creams	"	(b) 6,767	(b) 355,482	6,767	355,482
Dentifrices	-	(a)	720,315	(a)	1,255,043
Hair Preparations - Fixatives	-	(a)	(b) 379,405	(a)	379,405
Shampoos - Liquid	cwt.	3,270	64,180	8,596	167,800
Powder	"	(b) 577	(b) 16,144	577	16,144
Face Powder	"	(b) 2,723	(b) 213,965	2,723	213,965
Lipstick	-	(a)	(b) 340,369	(a)	340,369
Rouge	-	(a)	(b) 100,592	(a)	100,592
Soap (c) - Toilet and Hand	cwt.	3,033	61,542	267,773	1,941,916
Soft and Liquid	"	1,792	6,334	104,064	229,516
Shaving (including Cream)	"	3,000	76,542	6,995	255,952
Talcum Powder	"	(b) 25,110	(b) 640,306	25,110	640,306
Toilet Lanoline	lb.	86,144	9,965	86,144	9,965
<u>Other Products</u>					
Adhesives	cwt.	(b) 79,764	(b) 277,670	79,764	277,670
Essences, Flavouring -					
For Industrial Use	gal.	(a)	(a)	489,543	682,451
For Domestic Use	"	38,107	94,799	102,443	309,566
Disinfectants	-	(a)	232,151	(a)	564,579
Insecticides and Vermin Sprays	-	(a)	78,762	(a)	1,584,521
Weed Killers	-	(a)	11,229	(a)	283,797

(a) Value only available. (b) Includes particulars of articles produced in other works, details of which are not available for separate publication. (c) For full details of the production of Soap by Kinds, see Manufacturing Industries Summary No. 6 - Soap and Candles. (d) Not available for publication.

The following table shows particulars of the principal articles produced by the combined group - Chemicals, Drugs and Medicines, in respect of which comparative quantity details are available, for the years 1938-39, 1946-47 and 1947-48 to 1949-50. The particulars relate to total Australian production in all factories of the articles specified.

**TABLE VII : PRINCIPAL ARTICLES PRODUCED IN THE INDUSTRIAL GROUP -
CHEMICALS, DRUGS AND MEDICINES : ALL FACTORIES, AUSTRALIA.**

Articles Produced	Unit	1938-39	1946-46	1947-48	1948-49	1949-50
Acid - Hydrochloric	ton	2,737	1,862	3,034	3,425	3,579
Nitric	"	563	3,097	3,459	3,292	6,361
Ammonia Anhydrous	"	(a)	1,166	1,295	1,423	1,458
Aqua	"	(a)	1,310	1,766	1,755	1,625
Carbon Dioxide - Dry Ice	"	4,724	3,547	6,009	4,910	4,714
Gas	"		4,257	4,200	4,569	6,106
Chlorine	"	(b)	(b)	1,088	(b)	(b)
Sodium Hydroxide	"	2,876	11,359	14,406	14,114	11,613
Sulphate	"	1,607	6,085	9,858	8,332	7,131
Hypochlorite	gal.	(a)	75,971	325,526	417,631	412,732
Zinc Chloride	ton	(a)	278	362	520	205
Face Powder and Talcum Powder	cwt.	(a)	37,877	27,116	25,756	27,833
Toilet Lanoline	lb.	37,940	(b)	(b)	81,021	88,144
Adhesives	cwt.	(a)	62,567	112,350	111,740	76,784

(a) Details not collected. (b) Not available for publication.

5. **EMPLOYMENT:** The numbers of persons employed shown in Tables I, II, III, IX and X have been adjusted to represent the average employment over the whole year in those cases where short time was worked. In the following table the factories in the industrial group - Chemicals, Drugs and Medicines (including Explosives) - have been classified for the years 1938-39, 1946-46 and 1947-48 to 1949-50 according to the average number employed during the actual period worked.

TABLE VIII : FACTORIES CLASSIFIED ACCORDING TO PERSONS EMPLOYED : AUSTRALIA

Number of Persons Employed in each Factory	1938-39		1946-46		1947-48		1948-49		1949-50	
	Number of Fac- tories	Number Em- ployed	Number of Fac- tories	Number Em- ployed	Number of Fac- tories	Number Em- ployed	Number of Fac- tories	Number Em- ployed	Number of Fac- tories	Number Em- ployed
Under 4	45	90	56	128	64	134	77	167	77	160
4	19	76	20	80	20	80	25	100	23	92
5 to 10	66	457	100	734	114	793	110	770	118	823
11 to 20	52	800	79	1,184	71	1,114	67	975	61	895
21 to 50	37	1,212	50	1,821	63	2,020	70	2,288	68	2,295
51 to 100	18	1,223	34	2,567	29	2,119	23	1,662	25	1,881
101 to 200	13	4,250	33	10,407	24	3,550	25	3,537	21	3,083
201 to 300					3	768	3	772	2	496
301 and over					7	3,872	8	4,352	9	5,288
Total:	250	8,116	380	16,921	395	14,450	400	14,623	404	15,021
Average Number Employed per Factory	32		45		37		36		37	

Further details of employment in each of the industries, Industrial and Heavy Chemicals and Acids (including Explosives) and Pharmaceutical and Toilet Preparations, are furnished in the next three tables. In Table IX the numbers of males and females employed are shown according to the nature of their employment in each of the industries Industrial and Heavy Chemicals and Acids (including Explosives) and Pharmaceutical and Toilet Preparations for the year 1949-50.

TABLE IX : MALES AND FEMALES EMPLOYED ACCORDING TO OCCUPATIONAL STATUS:

AUSTRALIA, 1949-50.

Occupational Status	Industrial and Heavy Chemicals and Acids (incl. Explosives)		Pharmaceutical and Toilet Preparations		Total	
	Males	Females	Males	Females	Males	Females
Working Proprietors	46	3	60	16	106	19
Managerial and Clerical Staff, including Salaried Managers and Working Directors	914	496	386	416	1,300	912
Chemists, Draftsmen and other Laboratory and Research Staff	538	62	175	20	813	82
Foremen and Overseers	449	12	152	82	601	94
Workers in Factory (Skilled and Unskilled)	6,271	764	1,337	2,500	7,608	3,264
Carters (excluding Delivery only), Messengers and Persons Working Regularly at Home	94	-	11	2	105	2
TOTAL:	8,412	1,337	2,121	3,036	10,533	4,373

In Table X the numbers of males and females employed in the combined group - Chemicals, Drugs and Medicines (including Explosives) - are shown for the years 1938-39, 1948-49 and 1949-50, according to the nature of their employment, but because of the change in classification which operated from 1945-46, comparison between 1938-39 and the later years shown is not wholly effective.

TABLE X : MALES AND FEMALES EMPLOYED CLASSIFIED ACCORDING TO

OCCUPATIONAL STATUS : AUSTRALIA

Occupational Status	Males			Females		
	1938-39	1948-49	1949-50	1938-39	1948-49	1949-50
Working Proprietors	87	115	106	8	15	19
Managerial and Clerical Staff including Salaried Managers and Working Directors		1,268	1,300		869	912
Chemists, Draftsmen and other Laboratory and Research Staff	4,906	678	813	3,000	55	82
Foremen and Overseers		593	601		115	94
Workers in Factory (Skilled and Unskilled)		7,551	7,608		3,241	3,264
Others (Carters and Messengers, etc.)	25	94	105	4	17	2
TOTAL:	5,008	10,295	10,533	3,012	4,312	4,373

The numbers of persons employed in the Industrial Group - Chemicals, Drugs and Medicines (including Explosives) - on or about 15th June for the years 1939, 1946 and 1948 to 1950, are shown distributed according to age and sex in Table XI.

TABLE XI : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE AND SEX : AUSTRALIA

(Excluding Working Proprietors)

June	Under 16 years	16 years	17 years	18 years	19 years	20 years	Total 16 to 20 years	21 yrs. and over	Total all Ages
Males									
1939	149	(a)	(a)	(a)	(a)	(a)	950	4,750	5,849
1946	61	91	143	191	153	166	744	9,084	9,889
1948	31	73	92	136	134	162	597	9,524	10,152
1949	34	56	65	101	125	156	505	9,680	10,219
1950	44	63	99	94	104	125	485	10,336	10,865
Females									
1939	206	(a)	(a)	(a)	(a)	(a)	1,154	1,727	3,087
1946	116	154	188	220	208	177	947	3,700	4,763
1948	91	103	140	183	169	181	784	3,427	4,302
1949	83	124	126	169	189	165	773	3,371	4,227
1950	83	100	153	172	195	181	801	3,757	4,641

(a) Details not collected.

6. **POWER EQUIPMENT:** Statistics of the power equipment of the factories included in the industries - Industrial and Heavy Chemicals and Acids (including Explosives) and Pharmaceutical and Toilet Preparations - are given in the next table for the year 1949-50. The details include the rated horse-power of engines ordinarily in use together with those in reserve or idle.

TABLE XII : TYPES AND RATED HORSE-POWER OF ENGINES : AUSTRALIA, 1949-50

Class of Engine	Rated Horse-power of Engines					
	Ordinarily in Use			In Reserve or Idle		
	Industrial and Heavy Chemicals and Acids (Including Explosives)	Pharmaceutical & Toilet Preparations	Total	Industrial and Heavy Chemicals and Acids (Including Explosives)	Pharmaceutical & Toilet Preparations	Total
Steam - Reciprocating	3,245	26	3,271	336	-	336
Turbine	1,725	-	1,725	1,625	-	1,625
Internal Combustion - Gas	-	3	3	-	-	-
Petrol or Other Light Oils	1,870	372	2,242	334	160	494
Heavy Oils	204	111	315	524	69	593
Water	50	-	50	-	-	-
Total Prime Movers:	7,094	512	7,606	2,819	229	3,048
Motors driven by electricity						
Purchased	65,089	7,304	72,393	7,630	853	8,533
Own Generation	(a) 3,307	(a) 25	(a) 3,332	1,801	25	1,826
Total Electricity:	68,396	7,329	75,725	9,431	878	10,359
TOTAL POWER USED:	72,183	7,841	79,999	12,300	1,107	13,407

(a) These motors are driven by electricity generated by prime movers shown above, and are excluded from statistics of total power used, to avoid duplication.

7. POWER, FUEL AND LIGHT, ETC., USED: Details of the quantities and values of the various items of power, fuel and light used in the industries - Industrial and Heavy Chemicals and Acids (including Explosives) and Pharmaceutical and Toilet Preparations - are shown in the following table for the year 1949-50.

TABLE XIII : POWER, FUEL AND LIGHT, ETC., USED : AUSTRALIA, 1949-50

Particulars	Unit of Qty.	Quantity			Value (£)		
		Industrial and Heavy Chemicals and Acids (Including Explosives)	Pharmaceutical & Toilet Preparations	Total	Industrial and Heavy Chemicals and Acids (Including Explosives)	Pharmaceutical & Toilet Preparations	Total
Power, Fuel and Light -							
Coal - Black	ton	75,665	3,963	79,620	229,305	10,473	239,778
Brown	"	53,573	2,167	55,740	75,301	3,183	78,484
Brown Coal	"			1,019	2,592	-	2,592
Briquettes	"	1,019	-	1,019	78,796	2,423	81,219
Coke	"	28,569	711	29,280	6,008	1,039	7,047
Wood	"	40,010	519	40,529	150,443	6,582	157,025
Fuel Oil	gal.	2,919,636	103,452	3,023,088	43,747	2,683	46,430
Tar (Fuel)	"	1,601,267	107,450	1,708,717	325,761	30,607	356,368
Electricity	-	(a)	(a)	(a)	9,490	4,685	14,175
Gas	-	(a)	(a)	(a)			
Other (Charcoal, etc.)	-	(a)	(a)	(a)	54,417	217	54,634
Water and Lubricating Oil used	-	(a)	(a)	(a)	87,264	10,713	97,977
TOTAL:		(a)	(a)	(a)	1,063,924	72,690	1,136,614

(a) Value only available.

8. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY: Particulars of the book values of premises occupied and plants used for factory purposes as at 30th June for the years 1938-39, 1945-46 and 1947-48 to 1949-50 are shown in the next table for both classes of industry, viz. Industrial and Heavy Chemicals and Acids (including Explosives) and Pharmaceutical and Toilet Preparations. Details of the values of additions and replacements made and depreciation allowed during the same period are also shown. It should be noted that the amounts shown are those recorded by factories which were operating during each year and that changes in their numbers, as well as other factors, affect comparison from year to year.

TABLE XIV : VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY, ETC. :

AUSTRALIA

(£.)

Year	Book Values as at 30th June (a)		Additions and Replacements made during the year		Depreciation Allowed during year	
	Land and Buildings	Plant and Machinery	Land and Buildings	Plant and Machinery	Land and Buildings	Plant and Machinery
1938-39	2,884,121	2,088,131	325,592	309,872	46,097	201,113
1945-46	13,231,220	11,562,976	409,187	775,934	181,322	836,672
1947-48	12,566,332	10,039,100	247,179	944,241	97,683	696,406
1948-49	11,917,003	8,266,192	944,472	1,366,272	98,546	830,540
1949-50	12,401,763	10,474,957	670,986	3,263,320	80,700	792,487

(a) Includes value of rented premises and machinery.

9. EXTERNAL TRADE: The next two tables furnish particulars of the values of imports and exports of items included in the combined group "Chemicals, Drugs and Medicines".

TABLE XV : VALUE OF IMPORTS OF CHEMICALS, DRUGS, MEDICINES, ETC. : AUSTRALIA
(£A. f.o.b.)

Item	1938-39	1946-47	1947-48	1948-49	1949-50
Acids	122,021	300,317	316,652	264,333	329,253
Drugs and Medicinal Preparations	656,693	1,603,464	1,961,531	1,512,320	2,178,448
Sodium Salts	653,857	479,773	1,002,082	1,530,307	656,134
Cream of Tartar and Substitutes	19,696	35,690	23,937	263	17,001
Argol	230,922	156,777	93,547	59,513	47,123
Potassium Salts	279,700(b)	107,776	122,779	113,524	86,399
Dyes	415,412	902,392	1,011,171	1,650,694	762,036
Perfumery and Toilet Preparations	229,116	360,456	463,301	375,615	384,110
Essential Oils (Non-Spirituous)	138,240	461,597	383,555	227,422	320,956
All Other Chemicals and Drugs (a)	1,626,543	2,368,121	2,973,367	3,239,922	3,431,405
<u>TOTAL:</u>	4,372,200	6,784,371	8,422,002	8,981,913	8,213,665

(a) Excludes Soap and Fertilizers.

(b) Cyanides of Potassium and Sodium.

TABLE XVI : VALUE OF EXPORTS OF CHEMICALS, DRUGS, MEDICINES, ETC. : AUSTRALIA
(£A. f.o.b.)

Item	1938-39	1946-47	1947-48	1948-49	1949-50
Acids	27,632	240,604	130,693	140,838	157,116
Drugs and Medicinal Preparations	190,885	1,499,555	882,474	1,063,243	946,691
Sodium Salts	8,102	55,632	29,361	41,226	42,392
Cream of Tartar and Substitutes	31,146	46,107	51,082	53,378	91,270
Dyes	3,936	110,959	173,482	29,176	49,758
Perfumery and Toilet Preparations	43,014	406,377	192,443	165,070	154,161
Essential Oils (Non-Spirituous)	108,710	517,259	410,395	195,915	356,740
All Other Chemicals and Drugs(a)	315,121	1,573,467	1,270,001	1,024,373	1,013,235
<u>TOTAL:</u>	720,624	4,266,000	3,156,431	2,721,219	2,829,363

(a) Excludes Soaps and Fertilizers.

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COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
CANBERRA. A.C.T. 5TH NOVEMBER, 1951