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A. G. T.

OFFICIAL STATISTICS, COMMONWEALTH OF AUSTRALIA

MANUFACTURING INDUSTRIES

1944-45.

NO. 4. WHITE LEAD, PAINTS AND VARNISH.

Prepared Under Instructions from

THE RIGHT HONORABLE THE TREASURER

by

ROLAND WILSON, C.D.E., F.Cox., D.Phil., Ph.D.,

COMMONWEALTH STATISTICIAN.

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P R E F A C E

1. GENERAL: The publication of these surveys, which cover 33 industries, is being resumed following a period of suspension during the war. The previous issue respecting White Lead, Paints and Varnish related to the year 1940-41. The following have already been published:- Nos. 1. Cement, etc., and 2. Bricks, etc.
2. CLASSIFICATION OF FACTORIES: The classification of factories in Australia is based on the nature of the product. Where two or more distinct types of industrial activity are carried on in one establishment, factory proprietors are requested to furnish separate returns for each activity. In some instances, however, this is not practicable, and in such cases 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. In consequence, and to an extent which will vary with individual industries, the figures may include the subsidiary but extraneous activities of those establishments included in the industry, while they will exclude relevant activities which are subsidiary to the predominant activity of establishments classified to some other industry. This qualification is not important in the case of "White Lead, Paints and Varnish", the industry with which this summary is concerned.
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 an industrial 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 costs 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, taxation, insurance, advertising and other sundry charges are met.

ROLAND WILSON

COMMONWEALTH STATISTICIAN.

CANBERRA, A.C.T.

6th August, 1946.

WHITE LEAD, PAINTS AND VARNISH.

7.

1. SUMMARY OF STATISTICS. The following table furnishes a summary of the principal statistics of the factories engaged in the manufacture of White Lead, Paints and Varnish.

TABLE I. WHITE LEAD, PAINTS AND VARNISH: AUSTRALIA

Year	Number of Factories	Persons Employed (a)	Salaries and wages paid (b)	Power, Fuel and Light etc. Used	Value of Materials etc. Used (c)	Value of Production	Value of Output
No.	No.	£1000	£1000	£1000	£1000	£1000	£1000
1934-35	81	1,529	323	32	1,545	1,090	2,567
1935-36	83	1,774	361	35	1,826	1,264	3,126
1936-37	90	1,997	412	42	2,100	1,376	3,540
1937-38	96	2,156	468	45	2,321	1,564	4,000
1938-39	102	2,271	536	45	2,275	1,865	3,905
1939-40	105	2,367	570	49	2,718	1,536	4,304
1940-41	109	2,408	597	54	2,865	1,799	4,716
1941-42	109	2,363	600	57	2,052	1,504	4,353
1942-43	110	2,169	648	58	3,180	1,606	4,244
1943-44	111	2,350	736	56	3,944	1,922	5,332
1944-45	113	2,501	732	70	4,466	2,158	5,594

(a) Includes working proprietors. (b) Excludes amounts drawn by working proprietors. (c) Includes also containers, packing, etc., replacements of tools and repairs to plant.

In the following table, particulars of the industry are given for each State during the year 1944-45:-

TABLE II. WHITE LEAD, PAINTS AND VARNISH: STATES, 1944-45.

Particulars	N.S.W.	VIC.	QLD.	S.A.	W.A.	Tas.	AUSTRALIA
	No.	No.	No.	No.	No.	No.	No.
Number of Factories	54	39	5	11	3	1	113
Number Employed (a) -							
Males	1,360	383	42	127	17	3	1,958
Females	393	40	2	53	1	-	543
Total	1,773	423	44	180	18	3	2,501
Value of -	£.	£.	£.	£.	£.	£.	£.
Salaries and Wages Paid (b)	564,570	140,282	15,890	44,338	(c)	(c)	792,437
Power, Fuel & Light used	34,984	10,597	964	3,344	(c)	(c)	70,274
Materials etc. used	3,051,376	668,526	144,942	337,567	(c)	(c)	4,155,958
Production	1,455,300	468,666	74,095	135,476	(c)	(c)	2,156,069
Output	1,561,660	1,347,789	230,001	76,387	(c)	(c)	3,694,321
Land and Buildings	64,739	181,078	11,052	84,496	(c)	(c)	936,237
Plant and Machinery	222,436	104,998	13,310	41,589	(c)	(c)	459,252
H.P. of Engines ordinarily in use	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
	8,010	3,112	280	61	(c)	(c)	11,533

(a) Includes working proprietors. (b) Excludes amounts drawn by working proprietors. (c) Not available for publication. Figures are included in the total for Australia.
2. AVERAGE SALARIES, OUTPUT AND PRODUCTION. Particulars of the average salary and wage paid, together with the average value of output and production per person engaged are shown in the following table for each of the years 1934-35 to 1944-45:-

TABLE III. 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 (c)	Ratio per cent. of Salaries and wages to Value of Production
	£.	£.	£.	%
1934-35	205	1,637	669	29.65
1935-36	210	1,762	712	28.54
1936-37	212	1,761	704	29.50
1937-38	220	1,847	722	31.19
1938-39	240	1,720	698	33.75
1939-40	246	1,818	649	37.08
1940-41	253	1,958	747	33.19
1941-42	272	2,078	769	35.46
1942-43	307	2,234	741	40.37
1943-44	317	2,524	818	37.87
1944-45	322	2,577	863	36.72

(a) Excludes working proprietors and amounts drawn by them.
(b) Includes working proprietors.

3. MATERIALS USED AND ARTICLES PRODUCED. Particulars of the materials used and articles produced in White Lead, Paint and Varnish Factories during 1944-45 are shown in the following table. The quantities and values shown here are those furnished by the establishments included in this Summary only. The figures do not include similar materials used or articles produced in establishments not classified as White Lead, Paints and Varnish Factories.

TABLE IV. MATERIALS USED AND ARTICLES PRODUCED AUSTRALIA, 1944-45.

Particulars		Quantity	Value
Materials used -			£.
Pigments - White Lead - Own manufacture	.. cwt.	32,844	(c)
Pigments - White Lead - Purchased	.. "	43,200	106,556
Pig Lead	.. "	7,859	187,210
Zinc Oxide	.. "	62,308	116,835
Lithopone	.. "	(a)	(a)
Titanium Oxide	.. "	(a)	(a)
Oils - Linseed	.. gal.	1,672,917	766,745
Tung	.. "	7,861	10,287
Neatsfoot	.. "	(a)	(a)
Tallow	.. cwt.	(a)	(a)
Gums - Resin	.. "	35,956	114,634
Shellac	.. "	2,166	32,914
Solvents - Turpentine	.. gal.	655,280	66,037
Methylated Spirits	.. "	341,348	58,736
Kerosene	.. "	677,697	50,598
Acetate Butyl	.. "	(a)	(a)
Acetate	.. cwt.	7,122	65,294
Varnishes - Own manufacture	.. gal.	1,251,864	(c)
Varnishes - Purchased	.. "	190,459	109,660
Other material - Whiting	.. ton	2,839	30,961
Chalk	.. "	1,136	2,089
Urea	.. gal.	(a)	(a)
Phenol	.. "	2,136	1,496
Formaldehyde	.. "	11,784	3,799
Other, n.e.i. (b)	.. -	(c)	2,168,471
TOTAL VALUE OF MATERIALS USED		(a)	3,696,344
Articles produced -			
Paints - Water	.. lb.	5,552,417	193,083
Oil	.. gal.	(a)	(a)
Ready mixed	.. "	13,308,947	2,510,336
Other	.. "	(a)	(a)
Colours - Dry	.. lb.	6,519,893	86,992
Other	.. "	3,175,961	100,573
Varnishes - Consumed in own works	.. gal.	1,252,464	(c)
Varnishes - For sale or stocks	.. "	750,691	367,315
Kalsomine	.. lb.	4,858,694	77,748
Lacquer Nitro-Cellulose - Clear	.. gal.	129,841	92,540
Lacquer Nitro-Cellulose - Colours	.. "	531,051	459,218
Lacquer Thinners	.. "	703,171	314,121
Enamels	.. "	311,642	302,476
Stains (Oil, Spirit, Varnish and Greasy)	.. "	85,567	36,324
Red Lead	.. cwt.	38,096	69,271
White Lead	.. "	114,771	(d)284,474
Zinc Oxide	.. "	24,806	39,020
Zinc Oxide Paste	.. "	6,666	21,835
Putty	.. "	30,467	57,180
Paint and Varnish Removers	.. gal.	147,246	69,578
Synthetic Finishes - Clear	.. "	49,487	36,624
Synthetic Finishes - Colours	.. "	316,449	273,623
Synthetic Finishes - Thinners	.. "	76,213	20,456
Rubbing Compounds	.. lb.	56,374	3,205
Plastic Woods	.. "	13,459	1,352
Polishes	.. -	(c)	4,689
Other articles produced and value of Other work Done	.. -	(c)	1,172,289
TOTAL VALUE OF OUTPUT		(a)	6,694,321

(a) Not available for publication. (b) Including particulars of items marked (a).
 (c) Quantity only. (d) Partly estimated. (e) Value only.

4. **EMPLOYMENT:** The number of persons employed shown in Tables I, II and VI has 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 have been classified according to the average number employed during the actual period worked.

TABLE V. FACTORIES CLASSIFIED ACCORDING TO THE AVERAGE EMPLOYED: AUSTRALIA.

Number of Persons Employed in each Factory	1938-39		1941-42		1942-43		1943-44		1944-45	
	Number of Factories	Number Employed	Number of Factories	Number Employed	Number of Factories	Number Employed	Number of Factories	Number Employed	Number of Factories	Number Employed
Under 4	28	61	31	87	28	57	27	62	29	61
4	10	40	10	40	10	40	5	20	5	20
5 to 10	32	231	31	215	35	255	40	280	39	295
11 to 20	16	230	16	239	16	240	19	290	16	246
21 to 50	10	285	9	289	10	337	12	417	14	437
51 to 100	1	74	5	378	4	255	4	297	5	315
Over 100	5	1,289	4	1,159	4	954	4	964	5	1,136
TOTAL:	102	2,289	108	2,327	110	2,177	111	2,350	115	2,510
Average Number Employed per Factory.	22		22		20		21		22	

Further detail of employment in the industrial group "White Lead, Paints and Varnishes" are furnished in the following three tables. In the first, the persons employed have been classified according to the nature of their employment.

TABLE VI. PERSONS EMPLOYED CLASSIFIED ACCORDING TO THE GRADE OF OCCUPATION: AUSTRALIA.

Grade of Occupation	1938-39	1940-41	1941-42	1942-43	1943-44	1944-45
	No.	No.	No.	No.	No.	No.
Working Proprietors ..	41	51	52	55	55	42
Managers and Overseers ..	117	123	119	135	153	166
Clerical Staff ..	471	522	495	480	528	584
Engine Drivers and Firemen ..	9	10	10	9	9	2
Workers, skilled and unskilled ..	1,592	1,604	1,667	1,443	1,556	1,616
Others (Carters and messengers) ..	41	38	40	44	49	63
TOTAL:	2,271	2,408	2,363	2,167	2,350	2,501

The next table shows the actual number of persons employed (excluding Working Proprietors) on the pay-day nearest to the 15th of each month for the years 1943-44 and 1944-45:-

TABLE VII. PERSONS EMPLOYED ON PAY-DAY NEAREST TO THE 15TH OF EACH MONTH: AUSTRALIA (Working Proprietors excluded)

Month	1943-44			1944-45		
	Males	Females	Total	Males	Females	Total
July ..	1,709	516	2,225	1,613	527	2,140
August ..	1,706	514	2,220	1,621	527	2,148
September ..	1,711	511	2,222	1,643	523	2,166
October ..	1,726	525	2,251	1,672	524	2,196
November ..	1,730	533	2,263	1,676	526	2,202
December ..	1,755	545	2,300	1,911	540	2,451
January ..	1,766	534	2,300	1,932	530	2,462
February ..	1,765	545	2,310	1,959	536	2,495
March ..	1,791	530	2,321	1,971	553	2,524
April ..	1,789	530	2,319	1,964	558	2,522
May ..	1,807	534	2,341	1,932	551	2,483
June ..	1,836	531	2,369	2,005	564	2,569

A classification, according to age and sex, of the number of employees on or about 15th June for the years 1939 to 1945 is shown in the next table:-

TABLE VIII. DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE AND SEX : AUSTRALIA.

JUNE	MALES				FEMALES				PERSONS			
	Under 16 years	16 & under 21 yrs	adults	Total	Under 16 years	16 & under 21 yrs	adults	Total	Under 16 years	16 & under 21 yrs	adults	Total
1939	58	310	1,365	1,733	30	169	253	472	88	499	1,618	2,205
1940	35	324	1,492	1,851	9	224	259	492	44	548	1,751	2,343
1941	47	335	1,589	1,971	30	219	287	536	77	554	1,876	2,507
1942	31	187	1,365	1,583	10	184	286	480	41	371	1,651	2,063
1943	30	192	1,417	1,639	22	193	320	535	52	385	1,737	2,174
1944	30	189	1,619	1,838	20	178	335	531	50	367	1,952	2,369
1945	28	209	1,768	2,005	20	179	361	564	48	388	2,133	2,569

5. **POWER EQUIP. ETC.** Statistics of the power equipment of the factories included in this group are given in the next table. The details given for the years 1939-39, 1943-44 and 1944-45, include the rated horse-power of engines ordinarily in use, together with those in reserve or idle.

TABLE IX. TYPES AND RATED HORSE-POWER OF ENGINES : AUSTRALIA.

Class of Engine		Rated H.P. of Engines					
		Ordinarily in Use			In Reserve or Idle		
		1939-39	1943-44	1944-45	1939-39	1943-44	1944-45
Steam - Reciprocating	..	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
	..	8	8	8	-	-	-
Turbine	..	-	-	-	-	-	-
	..	-	-	-	-	-	-
Internal Combustion - Gas	..	-	-	-	-	-	-
	..	-	-	-	-	-	-
Petrol or Other Light Oils	..	92	-	-	-	-	-
	..	45	45	45	-	-	-
Heavy Oils	..	-	-	-	-	-	-
	..	-	-	-	-	-	-
Water	..	-	-	-	-	-	-
	..	-	-	-	-	-	-
Total Prime Movers		140	93	53	-	-	-
Motors driven by electricity - Purchased	..	7,550	11,007	11,480	130	122	250
	..	-	-	-	-	-	-
Own Generation	..	-	-	-	-	-	-
	..	7,550	11,007	11,480	130	122	250
Total Electricity		7,550	11,007	11,480	130	122	250
TOTAL POWER USED: (a)		7,696	11,080	11,533	130	122	250

(a) without Duplication.

6. **CONSUMPTION OF POWER, FUEL AND LIGHT.** Details of the quantities and values of the various items of power, fuel and light used in White Lead, Paint and Varnish factories are shown for the years 1939-39, 1943-44 and 1944-45 in the following table:-

TABLE X. POWER, FUEL AND LIGHT, ETC., USED : AUSTRALIA.

Particulars	Unit of quantity	Quantity			Value		
		1939-39	1943-44	1944-45	1939-39	1943-44	1944-45
Power, Fuel and Light -					£.	£.	£.
Coal - Black	.. ton	3,421	4,409	4,254	4,799	8,502	7,976
Brown	.. "	55	30	39	90	51	66
Coke	.. "	3,925	3,312	3,298	5,172	6,343	6,057
Wood	.. "	335	83	70	328	180	159
Fuel Oil	.. gallon	175,872	242,971	274,063	4,173	9,791	10,115
Electricity	.. (a)	(a)	(a)	(a)	21,356	26,961	29,522
Gas	.. (a)	(a)	(a)	(a)	4,316	8,047	8,605
Other (Charcoal, etc.)	.. (a)	(a)	(a)	(a)	297	168	320
Water and Lubricating Oil used	.. -	(a)	(a)	(a)	4,455	6,210	7,454
TOTAL.		(a)	(a)	(a)	44,992	66,262	70,274

(a) Value only available.

7. VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY: Particulars of the book values of premises and plant used for factory purposes at the 30th June for each of the seven years ended 1945, are shown in the next table. 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 number, as well as other factors, affect comparison from year to year.

TABLE XI. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY, ETC., AUSTRALIA.

Year	Book Values as at 30th June (a)		Additions & Replacements made during 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	761,345	322,222	60,561	54,977	8,263	31,689
1939-40	794,616	316,874	27,607	51,979	8,254	33,649
1940-41	812,759	358,447	37,671	43,655	9,164	37,607
1941-42	802,374	355,906	12,483	33,589	13,262	39,815
1942-43	826,790	365,410	15,050	34,167	9,130	39,369
1943-44	897,777	415,552	63,313	60,564	12,251	43,400
1944-45	936,927	459,252	24,728	29,325	14,954	52,461

(a) Includes estimated value of rented premises and machinery.

8. EXTERNAL TRADE. The values of imports and exports of a number of items included in the group - White Lead, Paints and Varnish - are given for the years 1938-39 and 1940-41 to 1944-45 in the following tables:-

TABLE XII. VALUE OF IMPORTS OF SPECIFIED ITEMS OF WHITE LEAD, PAINTS AND VARNISH: AUSTRALIA.

Item	1938-39	1940-41	1941-42	1942-43	1943-44	1944-45
	£s.	£s.	£s.	£s.	£s.	£s.
Paints and Colours -						
Dry Colours ..	361,656	465,455	413,589	269,616	265,634	336,643
Ground in liquid ..	3,897	2,822	5,584	783	146	210
Kalsomine, Water Paints, etc. ..	1,970	4	4	-	-	-
Prepared for use (not enamel) ..	30,900	24,134	16,042	5,673	5,641	5,700
Enamels and glosses ..	5,363	2,310	4,061	509	40	822
Ships' anti-fouling compositions ..	4,891	10,923	10,267	16,867	9,222	1,149
White Lead ..	490	316	289	676	448	-
Whiting and Paris White ..	16,691	13,648	18,971	12,666	11,364	15,893
Zinc Oxide ..	22,963	15,125	7,267	790	1,589	11,191
Putty ..	1,579	719	490	69	-	3
Varnishes, Stains, Lacquers, etc. ..	17,307	13,412	24,913	9,784	7,736	4,578
Other paints, etc. ..	239,673	317,956	320,091	222,953	228,967	239,734
TOTAL:	727,362	866,834	819,568	560,410	550,911	615,923

TABLE XIII. VALUE OF EXPORTS OF SPECIFIED ITEMS OF WHITE LEAD, PAINTS AND VARNISH: AUSTRALIA.

Item	1938-39	1940-41	1941-42	1942-43	1943-44	1944-45
	£s.	£s.	£s.	£s.	£s.	£s.
Whiting and Putty ..	329	1,466	1,036	523	446	723
Varnishes ..	63,487	3,396	1,568	477	336	566
White Lead ..	23,366	23,931	45,331	61,165	31,444	18,441
Dry Colours ..	28,636	46,805	30,746	17,404	31,569	23,326
Paints Ground in Liquid ..	27,210	35,748	71,590	26,456	12,466	20,205
All Other Paints ..	35,704	64,163	56,444	58,063	43,092	40,785
TOTAL:	176,252	195,573	209,137	164,390	109,373	104,069

9. MINIMUM WEEKLY RATES OF WAGE. The following table shows, in respect of White Lead, Paints and Varnish, the minimum weekly rates of wage in force at 30th June, 1945. These have been prescribed by State Industrial Tribunals. Where no rate is shown, it indicates that the particular occupation is not specifically provided for in the award or determination. In all cases the hours of labour constituting a full week's work are 44:-

TABLE XIV. MINUTE WHEELY RATES OF WAGE AS AT 30TH JUNE, 1945.

OCCUPATION	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.
	s. d	s. d	s. d	s. d	s. d	s. d
<u>WHITE LEAD</u>						
Employee engaged in -						
Handling pots, tan bark,						
timber, pig lead ..	120. 6					
Setting and weighing ..	128. 0					
Lead Kettles ..	127. 0					
Casting Machines ..	120. 6					
Grinding and filling White						
Lead in Oil ..	127. 0					
Filling dry White Lead ..	136. 0					
Fulper man ..	132. 0					
Drawer and Stripper ..	137. 6					
Finisher and header-up ..	141. 0					
Leading hand ..	145. 0					
<u>PAINTS, LACQUERS, ETC.</u>						
Employee engaged in -						
Paint mixing ..	122. 0	111. 0				
Kalsomine mixing ..	122. 6	111. 0				
Paint tinting ..	125. 0	116. 0				
Varnish blender ..	118. 0	111. 0				
Varnish maker ..	130. 0	128. 6				
Gum runner ..	130. 0	125. 6	107. 0			
Resin treater ..	130. 0	111. 0				
Assistant ..	116. 0	108. 0				
Oil boiler ..	127. 6	111. 0				
Oil refiner ..	125. 0	111. 0				
Leading hand ..	137. 6	133. 6	122. 0			
<u>ZINC</u>						
Packer (white Zinc) ..	118. 0					
Furnaceman -						
Treating raw material ..	122. 0					
Retort man ..	115. 0					
Leading hand ..	129. 6					
<u>ADULT FEMALE</u>						
..	60. 0	63. 6	56. 6			
to						
65. 0						
<u>YOUTH -</u>						
Under 16 years ..	37. 9	26. 9	31. 9			
16 years ..	45. 6	34. 3	36. 6			
17 " ..	52. 7	40. 3	42. 1			
18 " ..	52. 7	48. 6	48. 6			
19 " ..	77.11	60. 9	58. 1			
20 " ..	101. 3	60. 6	72. 7			
<u>JUNIOR FEMALE</u>						
Under 17 years ..	37. 3	34. 6	29. 0			
17 years ..	43. 6	40. 3	33. 2			
18 " ..	49.10	43. 0	37.11			
19 " ..	49.10	49. 6	37.11			
20 " ..	54. 7	55. 0	42. 2			

ROLAND WILSON
COMMONWEALTH STATISTICIAN.

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,

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