



**Australian
Bureau of
Statistics**

**November 1989
Production of Paper, Plastics
Paints, Industrial Chemicals
and Detergents
Australia**

Catalogue No. 8362.0

EMBARGOED UNTIL 11.30 A.M. 21 FEBRUARY 1990

**PRODUCTION OF PAPER, PLASTICS, PAINTS, INDUSTRIAL
CHEMICALS AND DETERGENTS, AUSTRALIA
NOVEMBER 1989**

IAN CASTLES
Australian Statistician

AUSTRALIAN BUREAU OF STATISTICS

CATALOGUE NO. 8362.0

© Commonwealth of Australia 1990

PHONE INQUIRIES	• <i>about these statistics and the availability of related unpublished statistics</i> — contact Kevin Squair on Canberra (062) 52 5558 or any ABS State office. • <i>about other statistics and ABS services</i> — contact Information Services on Canberra (062) 52 5402, 52 6007, 52 6627 or any ABS State office.
MAIL INQUIRIES	• <i>write to Information Services</i>, ABS, P.O. Box 10, Belconnen, A.C.T. 2616 or any ABS State office.
ELECTRONIC SERVICES	• on VIATEL — key *656#. • on AUSSTATS — phone (062) 52 6017. • on TELESTATS — phone (062) 52 5404 Foreign Trade statistics inquiries, (062) 52 5405 Main Economic Indicator inquiries.

CONTENTS

<i>Table</i>	<i>Page</i>
1. Wood pulp	1
2. Paper and paperboard	1
3. Plastic tubes, pipes, hoses, film, sheeting and coated materials	2
4. Plastics in primary forms	2
5. Paints and other surface coatings	3
6. Paints and other surface coatings : States	4
7. Industrial chemicals	5
8. Organic surface-active agents	5
9. Detergents and soap	6
.. Explanatory Notes	7

TABLE 1. WOOD PULP(a)
(tonnes)

Period	Mechanical (251.20)	Other (251.70,90)	Total
1986-87	373,789	534,629	908,418
1987-88	414,297	580,192	994,489
1988-89	438,775	597,160	1,035,935
1988—			
September	38,415	56,660	95,075
October	38,331	45,695	84,026
November	36,165	48,142	84,307
December	37,037	51,659	88,696
1989—			
January	36,577	48,259	84,836
February	36,253	50,602	86,855
March	27,815	53,482	81,297
April	35,778	41,227	77,005
May	38,635	55,307	93,942
June	36,162	49,550	85,712
July	36,329	47,166	83,495
August	40,845	46,544	87,389
September	32,434	50,895	83,329
October	37,571	41,414	78,985
November	32,558	47,604	80,162
1988-89: July to Nov.	190,518	247,074	437,592
1989-90: July to Nov.	179,737	233,623	413,360

(a) Quantities shown represent tonnes air-dried.

TABLE 2. PAPER AND PAPERBOARD
(tonnes)

Period	Newsprint (641.10)	Tissue and sanitary(b) (641.65,66,67)	Other paper and paperboard in strips, rolls or sheets(a)						Total
			Parchmen(c)		Embossed(d)		Graphic (642.48)	Other (641.87)	
			Grease- proof (641.80)	Other (641.81)	Corrugated paperboard (641.68)	Other (641.82)			
1986-87	386,320	133,402							
1987-88	401,066	n.p.							
1988-89	401,269	n.p.							
1988—									
September	35,915	n.p.							
October	35,855	n.p.							
November	33,526	n.p.							
December	34,711	n.p.							
1989—									
January	32,685	n.p.							
February	31,244	n.p.							
March	24,053	n.p.							
April	33,756	n.p.							
May	37,850	n.p.							
June	32,236	n.p.							
July	32,250	17,763	—	n.y.a.	n.y.a.	n.y.a.	48,115	63,531	178,906
August	33,055	17,185	—	n.y.a.	n.y.a.	n.y.a.	52,194	64,603	183,787
September	27,289	15,009	—	n.y.a.	n.y.a.	n.y.a.	62,152	77,012	195,491
October	32,981	n.p.	—	n.y.a.	n.y.a.	n.y.a.	60,154	60,015	177,265
November	29,489	n.p.	—	—	n.y.a.	n.y.a.	47,628	68,983	169,153
1988-89: July to Nov.	174,734	n.p.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1989-90: July to Nov.	155,064	n.p.	—	n.y.a.	n.y.a.	n.y.a.	270,243	334,144	904,602

(a) Rolls or strips exceeding 15 cm wide; sheets exceeding 36 cm by 15 cm, unfolded. (b) Rolls exceeding 36 cm wide; sheets with at least one side exceeding 36 cm unfolded. (c) Includes vegetable parchment, tracing papers, glassine and other glazed, transparent or translucent papers. (d) Includes corrugated, creped, crinkled, embossed or perforated.

TABLE 3. PLASTIC TUBES, PIPES, HOSES, FILM, SHEETING AND COATED MATERIALS (tonnes)

(continued)								
Flexible plates, sheets, foil and strip of plastic(a)						Tubes, pipes and hoses		
Period	Polymers of ethylene				Plastic coated textile materials (657.32)	Tubes, pipes and hoses		
	Polymers of vinyl chloride (582.32)	Low density(b) (582.31)	High density (582.38)	Polymers of propylene (582.33)		Rigid PVC(c) (581.22)		
		Other (582.34)						
Not available prior to July 1989								
1989—	r							
July	1,043	9,976	2,114	1,007	1,685	1,094	5,937	
August	1,249	10,553	2,216	1,171	1,420	1,515	7,173	
September	1,177	9,815	2,432	1,119	1,499	1,431	6,905	
October	1,114	10,164	2,409	1,038	1,733	1,664	6,725	
November	1,316	9,954	2,095	1,242	1,622	1,928	7,663	
1989-90: July to Nov.	5,899	50,462	11,266	5,577	7,959	7,632	34,403	

(a) Excludes self-adhesive, floor, wall and ceiling coverings, vulcanised fibre and plastic foam. Also excludes reinforced, laminated or supported with other materials.
 (b) Includes linear low density polyethylene. (c) Plasticiser content 1 per cent or less by weight of PVC. Excludes electrical conduit.

TABLE 4. PLASTICS IN PRIMARY FORMS(a) (tonnes)

Period	Not mixed or compound(b)						Regranulated scrap			Total
	Polyethylene (571.13)	Polystyrene (572.14)	PVC (573.15)	Poly- propylene (575.14)	Polyvinyl acetate (575.98)	Other (576.01)	Mixed or compound (b) (576.02)	Single	Mixtures	
								thermo- plastic (576.04)	(579.00)	
1986-87										904,108
1987-88										990,204
1988-89										986,373
1988—										87,587
September										89,677
October										82,975
November										72,590
December										
Not available separately prior to July 1989										
1989—										76,977
January										73,146
February										71,924
March										80,868
April										88,288
May										85,586
June					r		r			76,249
July	14,319	n.p.	n.p.	n.p.	657	29,529	2,235	n.p.		88,950
August	17,807	4,198	n.p.	15,864	833	31,891	2,846	n.p.		88,916
September	20,581	4,843	n.p.	14,702	747	31,229	2,263	n.p.		89,962
October	20,130	5,790	n.p.	15,305	r922	34,163	3,160	n.p.		89,490
November	19,364	5,434	n.p.	14,711	1,007	33,118	3,242	n.p.		
1988-89: July to Nov.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	436,994
1989-90: July to Nov.	92,201	n.p.	n.p.	n.p.	4,166	159,930	13,746	n.p.		438,567

(a) Primary forms includes liquid, paste, powder, granules, flakes, blocks, irregular shapes, lumps and similar bulk forms. (b) Excludes reggranulated scrap.

TABLE 5. PAINTS AND OTHER SURFACE COATINGS
(*000 litres)

Architectural and decorative paints, enamels and clears(a)								
Period	Solvent thinned				Water thinned			
	Primers and undercoats (533.65)	Finishing coats		Clears (533.68)	Primers and undercoats (533.69)	Plastic latex		Other water based (533.73)
		Pigmented	Clears			Finishing coats		
						Full gloss (533.66)	Other (533.67)	
1986-87	6,515	11,656	4,805	3,720	5,309	29,047	23,656	4,129
1987-88	6,170	12,227	4,796	3,701	6,264	31,889	26,347	4,879
1988-89	6,024	11,285	4,947	3,861	6,676	35,515	31,812	5,675
1988—								
September	475	908	409	341	469	2,656	2,414	621
October	452	803	402	368	568	3,252	2,688	585
November	652	1,151	528	299	617	3,068	3,155	585
December	481	895	371	363	626	3,793	3,250	535
1989—								
January	492	829	355	242	600	3,093	2,729	402
February	471	1,019	358	305	532	3,483	2,709	517
March	623	1,245	466	294	573	3,253	2,883	498
April	433	796	365	247	483	2,791	2,619	345
May	621	1,207	499	378	626	2,770	2,910	457
June	483	886	420	328	555	2,284	2,060	365
July	437	r967	361	296	r533	r2,656	r2,486	r418
August	433	r862	367	314	r556	r2,264	r2,490	r559
September	577	r1,101	392	365	r629	r3,121	r3,014	r683
October	461	r962	437	440	r742	r3,155	r3,101	r707
November	655	1,271	486	440	680	3,267	3,280	704
1988-89: July to Nov.	2,420	4,409	2,113	1,702	2,681	14,048	12,651	2,554
1989-90: July to Nov.	2,563	5,163	2,042	1,855	3,140	14,462	14,371	3,071

TABLE 5. PAINTS AND OTHER SURFACE COATINGS—continued
(*000 litres)

Period	Industrial paints, enamels and clears(b)						
	Automotive			Other industrial			
	Finishing coats			Finishing coats			
	Primers and undercoats (533.74)	Nitro-cellulose lacquers (533.75)	Other (533.76)	Primers and undercoats (533.78)	Nitro-cellulose lacquers		Other
					Clears (533.79)	Colours (533.81)	
1986-87	4,422	459	9,259	7,715	3,009	1,162	7,051
1987-88	4,908	547	10,037	9,040	3,199	1,233	8,753
1988-89	5,038	575	10,991	10,292	3,522	r1,155	8,583
1988—							
September	394	58	888	877	277	100	635
October	351	49	806	699	308	99	859
November	448	59	869	866	389	85	848
December	429	24	921	878	235	96	778
1989—							
January	275	23	529	610	172	49	618
February	419	61	899	841	309	76	665
March	374	57	1,185	917	324	109	731
April	424	43	790	895	292	82	690
May	535	61	1,149	1,113	403	111	799
June	533	54	1,146	980	295	115	613
July	398	54	897	r891	r286	81	r596
August	495	40	887	r850	r336	71	692
September	554	52	990	r1,030	r351	113	r714
October	568	54	932	r1,146	r424	105	r636
November	461	58	918	1,058	381	102	601
1988-89: July to Nov.	2,049	254	4,371	4,059	1,492	517	3,689
1989-90: July to Nov.	2,475	258	4,624	4,975	1,778	472	3,239

(a) Includes all paints and coatings for use on buildings and structures. Excludes heavy duty coatings. (b) Includes lacquers and water thinned industrial products.

TABLE 5. PAINTS AND OTHER SURFACE COATINGS—continued
(*'000 litres)

Period	Heavy duty coatings(a) (533.77)	Wood stains (oil, spirit, etc.) packed for sale or transfer out(b) (533.84)	Marine coatings (c) (533.85)	Thinners	
				For nitro-cellulose coatings (533.56)	For all other coatings (533.57)
1986-87	7,880	2,807	1,820	8,106	17,186
1987-88	9,137	2,342	2,076	8,751	18,162
1988-89	10,832	2,448	2,092	8,641	18,312
1988—					
September	763	218	165	720	1,531
October	828	231	183	784	1,610
November	866	223	206	769	1,692
December	990	218	209	598	1,471
1989—					
January	672	171	156	445	1,184
February	947	213	191	743	1,448
March	976	230	162	841	1,764
April	941	179	182	710	1,518
May	1,039	223	180	821	1,664
June	1,040	169	171	627	1,643
July	985	178	165	627	1,420
August	973	182	141	624	1,482
September	1,146	218	146	802	1,895
October	962	261	211	774	1,845
November	1,127	218	184	760	1,974
1988-89: July to Nov.	4,227	1,045	840	3,757	7,619
1989-90: July to Nov.	5,192	1,057	847	3,587	8,617

(a) Includes specialty coatings specifically designed for the protection of interiors and exteriors of buildings, plant and equipment etc. (b) Includes pre-pigmented, Madison and Creosote types. (c) Includes primers and undercoats, underwater compositions, boat-topping, deck paints and marine varnishes. Excludes superstructure paints which are included with architectural and decorative paints.

TABLE 6. PAINTS AND OTHER SURFACE COATINGS: STATES—NOVEMBER 1989
(*'000 litres)

Code No.	Item	NSW	Vic.	Other States	Australia
	Architectural and decorative paints, enamels and clears(a)—				
	Solvent thinned—				
533.65	Primers and undercoats	169	117	370	655
	Finishing coats, pigmented—				
533.66	Full gloss	215	300	756	1,271
533.67	Other than full gloss	97	139	250	486
533.68	Finishing coats, clears	287	124	29	440
	Water thinned—				
	Plastic latex—				
533.69	Primers and undercoats	296	132	252	680
	Finishing coats—				
533.71	Flat	1,796	592	879	3,267
533.72	Other than flat (satin, semi-gloss, gloss)	1,591	797	897	3,280
533.73	Other water based	453	110	141	704
	Industrial paints, enamels and clears(b)—				
	Automotive—				
533.74	Primers and undercoats	57	341	63	461
	Finishing coats—				
533.75	Nitro-cellulose lacquers	34	n.p.	n.p.	58
533.76	Other	248	641	29	918
	Other industrial—				
533.78	Primers and undercoats	511	311	236	1,058
	Finishing coats—				
	Nitro-cellulose lacquers—				
533.79	Clears	199	99	83	381
533.81	Colours	62	23	16	102
	Other—				
533.82	Clears	122	436	43	601
533.83	Colours	1,148	955	327	2,430
533.77	Heavy duty coatings(c)	164	343	619	1,127
533.84	Wood stains (oil, spirit, etc.) packed for sale or transfer out(d)	97	111	9	218
533.85	Marine coatings(e)	n.p.	n.p.	130	184
	Thinners—				
533.56	For nitro-cellulose coatings	342	173	244	760
533.57	For all other coatings	606	915	452	1,974

(a) Includes all paints and coatings for use on buildings and structures. Excludes heavy duty coatings.(b) Includes lacquers and water thinned industrial products.(c) Includes specialty coatings specifically designed for the protection of interiors and exteriors of buildings, plant and equipment etc.(d) Includes pre-pigmented, Madison and Creosote types.(e) Includes primers and undercoats, underwater compositions, boat-topping, deck paints and marine varnishes. Excludes superstructure paints which are included with architectural and decorative paints.

TABLE 7. INDUSTRIAL CHEMICALS

Period	Acids (in terms of 100% acid)				Other mineral or Chemical fertilisers			
	Hydrochloric; Chlorosulphuric (522.31)	Sulphuric; Oleum		Trend(b)	Ammonium sulphate (562.13)	Superphosphate(c) (562.23,24.25)	Phosphatic (562.26)	Potassic (562.30)
		Original (522.32)	Seasonality Adjusted(a)					
		'000 tonnes	'000 tonnes					
	tonnes	'000 tonnes	'000 tonnes	tonnes	tonnes	tonnes	tonnes	
1986-87		1,680	..	..	165,397			
1987-88		1,818	..	..	179,211			
1988-89		1,904	..	..	164,776			
1988—								
September		146	168	164	17,456			
October	Not available	140	156	159	10,924		Not available	prior to July 1989
November	prior to	132	133	155	10,863			
December	July 1989	191	168	154	19,887			
1989—								
January		177	154	155	9,207			
February		158	157	158	11,500			
March		178	158	160	11,707			
April		171	156	158	n.p.			
May		182	171	152	14,921			
June		140	144	143	n.p.			
July	4,951	98	120	133	115,667	n.y.a.	n.y.a.	n.y.a.
August	n.p.	105	121	124	22,242	155,698	n.y.a.	n.y.a.
September	n.p.	100	118	118	14,369	126,699	n.y.a.	n.y.a.
October	n.p.	100	109	114	23,301	121,464	n.y.a.	n.y.a.
November	3,073	117	118	112	21,248	227,325	n.y.a.	n.y.a.
1988-89: July to Nov.								
	n.a.	706	..	..	77,254	n.a.	n.a.	n.a.
1989-90: July to Nov.								
	n.p.	521	..	..	94,611	746,853	n.y.a.	n.y.a.

(a) See paragraph 5, Explanatory Notes. (b) See paragraph 6 to 8, Explanatory Notes. (c) Double and triple superphosphates expressed in terms of single phosphate i.e. 9% P equivalent.

TABLE 8. ORGANIC SURFACE-ACTIVE AGENTS (a)
(tonnes)

Period	Anionic(b) (554.24)	Cationic(c) (554.25)	Other(d) (554.26)
Not available prior to July 1989			
1989—			
July	2,012	760	r606
August	2,366	747	457
September	r2,597	626	445
October r	2,245	925	555
November	2,199	1,024	497
1989-90: July to Nov.	11,419	4,082	2,560

(a) Organic surface-active agents are capable of absorption at an interface and in that state display a number of physico-chemical properties responsible for surface activity (e.g. reduction of surface tension, foaming, emulsifying and wetting). Excludes soap. (b) Organic surface-active agents which ionise in aqueous solution to produce negatively charged organic ions responsible for surface activity (e.g. sulphates and sulphonates of fats, vegetable oils or resin acids). (c) Organic surface-active agents which ionise in aqueous solution to produce positively charged organic ions responsible for surface activity (e.g. salts of fatty amines). (d) Includes non-ionic and amphiphilic agents.

TABLE 9. DETERGENTS AND SOAP

Period	Soaps in bars, cakes, moulded pieces or shapes for personal use(a) (554.12)	Surface-active washing or cleaning preparations						
		Shampoo (553.31)	Scouring preparations(b) (554.39)	Fabric washing		Dish washing preparations		Soaking, rinsing or bleaching preparations (554.53)
				Liquid (554.28)	Other(c) (554.29)	Liquid (554.51)	Other(c) (554.52)	
				'000 litres	tonnes	'000 litres	tonnes	Other(d) (554.54)
1986-87	27,383	tonnes	tonnes					
1987-88	30,330							
1988-89	26,764							
1988—								
September	2,320							
October	2,330							
November	1,988							
December	1,590							
Not available prior to July 1989								
1989—								
January	913							
February	2,199							
March	2,263							
April	2,228							
May	2,302							
June	2,983							
July r	2,910	1,488	868	5,182	9,282	2,611	292	1,825
August r	3,112	1,401	854	6,096	10,557	3,154	348	1,678
September r	3,232	1,756	974	7,629	9,726	3,430	359	2,186
October r	2,867	1,786	1,194	6,179	10,890	2,605	499	2,255
November	2,770	1,611	607	5,179	9,403	2,960	346	2,333
1988-89: July to Nov.	12,286	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1989-90: July to Nov.	14,890	8,042	4,498	30,265	49,858	14,760	1,846	10,277
								16,960

(a) Includes abrasive and medicated. (b) Includes abrasive soap not in bars, cakes, moulded pieces or shapes. (c) For example powders. (d) Includes surface-active preparations for use in the processing or preparation of minerals, hides and skins, paper, dyed textiles, textile fibres, pharmaceutical and cosmetic products.

EXPLANATORY NOTES

Introduction

This publication is one of a series of nine containing monthly and quarterly production statistics. The titles of the other publications of this series are shown in paragraph 9.

Classification

2. Data contained in these publications are mostly based on monthly or quarterly collections conducted by the Australian Bureau of Statistics (ABS). Most items are identified by the commodity codes used in Australian Manufacturing Production Commodity Classification (AMPCC), which was developed by the ABS to facilitate greater comparability of manufacturing production commodity statistics with import and export commodity statistics. AMPCC items were introduced into the monthly production collections (catalogues 8301.0, 8357.0 to 8363.0, 8367.0 and 8368.0) from July 1989. The last available data relating to superseded commodity items are published in the June 1989 issue. In cases where data are derived from sources other than ABS collections no commodity code is shown and the source of the data is acknowledged in a footnote.

Scope and coverage

3. Manufacturing commodity statistics collected by the ABS exclude details relating to single establishment manufacturing enterprises with fewer than four persons employed and production of establishments predominantly engaged in non-manufacturing activities but which may carry on, in a minor way, some manufacturing. However, except for a few commodities the effect on production levels and movements is marginal.

4. Annual figures shown in this publication are derived by aggregating monthly/quarterly production and relate to production during the year ended 30 June. They may differ from annual manufacturing census data which relate to the census year and, in the case of businesses unable to report on a June year basis, include details in respect of substitute accounting periods.

Seasonal adjustment and trend estimates

5. This publication contains seasonally adjusted statistics of several items. In the seasonal adjustment account had been taken not only of normal seasonal factors but also, where appropriate, of 'working-day' effects (arising from the varying numbers of Sundays, Mondays, Tuesdays etc. in the month) and the influence of Easter and Australia Day which may, in successive years, affect figures for different months. However, care should be exercised in interpreting the figures for those months in which Christmas/New Year and Easter holidays fall as some manufacturers vary holiday shutdowns in the light of prevailing demand for their products. Details of the methods used in seasonally adjusting these and other series are available on request.

6. The smoothing of seasonally adjusted series to create trend estimates is a means of reducing the impact of the irregular component of the series. The trend estimates have been derived by applying a 13-term Henderson

weighted moving average to the seasonally adjusted series.

7. While this smoothing technique enables estimates of trend to be produced for the latest month, it does result in revisions to the estimates for the most recent months as data for subsequent months become available. Generally subsequent revisions become smaller and after 3 months have little impact on the series. There will also be revisions as a result of revisions to the original estimates and annual reviews of seasonal and 'working day' factors.

8. Users may wish to refer to the ABS Information Papers *A Guide to Smoothing Time Series — Estimates of 'Trend' (1316.0)* and *Time Series Decomposition — An Overview (1317.0)* for more detailed information on smoothing of seasonally adjusted time series data.

Related publications

9. Other ABS publications which may be of interest are:

Production Statistics, Australia, Preliminary (8301.0) — issued monthly

Production of Household Appliances and Electrical Equipment, Australia (8357.0) — issued monthly

Production of Clothing and Footwear, Australia (8358.0) — issued monthly

Production of Food, Drink, Tobacco and Stock and Poultry Food, Australia (8359.0) — issued monthly

Production of Fibres, Yarns, Fabrics, Bedding and Floor Coverings, Australia (8360.0) — issued monthly

Production of Building Materials and Fittings, Australia (8361.0) — issued monthly

Production of Transport Equipment, Australia (8363.0) — issued quarterly

Production of Metal Products, Australia (8367.0) — issued monthly

Production of Energy Products, Australia (8368.0) — issued monthly

Manufacturing Commodities : Selected Principal Articles Produced, Australia 1986-87, Preliminary (8365.0)

Manufacturing Commodities : Principal Articles Produced, Australia 1986-87 (8303.0)

10. Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia (1101.0)*. The ABS also issues, on Tuesdays and Fridays, a *Publications Advice (1105.0)* which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

Symbols and other usages

- n.p. not available for separate publication
(but included in totals where applicable)
- .. not applicable
- r revised since last issue

n.a. not available
 n.y.a. not yet available

Electronic services

VIATEL. Key *656# for selected current economic, social and demographic statistics.

AUSSTATS. Thousands of up-to-date time series are available on this ABS on-line service through PAXUS COMNET.

For further information phone the AUSSTATS Help Desk on (062) 52 6017.

TELESTATS. This service provides:

- foreign trade statistics tailored to users' requirements. Further information is available on (062) 52 5404.
- text and tables for selected Main Economic Indicator publications. Further information is available on (062) 52 5405.

Floppy disk service

Selected ABS statistics are available on floppy disk. Further information is available on (062) 52 6684.

Recommended retail price: \$5.50



2083620011890

ISSN 1034-4533