



Manufacturing Production Australia

**Plastics, Rubber, Paints
Detergents and
Industrial Chemicals**

September - November 1993

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MANUFACTURING PRODUCTION, AUSTRALIA
PLASTICS, RUBBER, PAINTS, DETERGENTS AND
INDUSTRIAL CHEMICALS
SEPTEMBER - NOVEMBER 1993

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INQUIRIES

- * for further information about statistics in this publication and the availability of related unpublished statistics, contact Rod Smith on Melbourne (03) 615 7635 or any ABS office.
- * for information about other ABS statistics and services please refer to the back page of this publication.

TABLE 1. PLASTICS IN PRIMARY FORMS(a)
(tonnes)

Period	Mixed or compound (b)	Not mixed or compound(b)				Other (573.15, 576.01, 576.04, 579.00)	Total
		Polyethylene (571.13)	Polyethylene (572.14)	Polypropylene (575.14)	Polyvinyl acetate (575.98)		
1990-91	46,345	217,126	62,266	169,635	12,722	441,168	949,262
1991-92	43,374	234,195	65,230	190,882	11,486	454,631	1,002,288
1992-93	49,727	254,515	62,103	214,790	10,860	430,507	1,022,502
1992 —							
September	4,174	22,124	4,473	21,059	884	40,364	93,078
October	4,948	21,822	4,470	21,213	889	39,136	92,478
November	4,383	21,106	5,587	19,140	930	34,787	89,933
December	4,202	22,636	4,388	20,604	764	30,521	83,415
1993 —							
January	2,368	21,663	4,393	19,660	731	23,498	72,313
February	4,249	19,237	5,241	15,112	947	33,284	78,070
March	4,157	21,435	6,251	14,668	849	41,577	88,937
April	4,096	20,251	5,618	13,660	1,035	34,614	79,274
May	4,365	20,137	5,102	17,536	1,097	37,650	85,887
June	4,226	20,781	6,369	16,756	1,070	38,315	87,517
July	4,640	24,418	5,740	18,857	1,380	39,815	94,850
August	4,555	21,391	5,876	20,815	1,084	39,066	94,787
September	4,372	22,277	4,939	19,491	1,261	43,325	95,665
October	5,281	23,407	5,688	19,337	1,529	39,916	95,158
November	4,906	22,823	7,275	17,331	1,135	36,479	89,949
1992-93: July to Nov.	22,064	108,375	24,741	96,794	4,367	190,748	447,089
1993-94: July to Nov.	23,754	116,316	29,518	93,831	6,389	198,601	470,409

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

TABLE 2. PLASTIC TUBES, PIPES, HOSES, FILM, SHEETING AND COATED MATERIALS

Period	Flexible plates, sheets, foil and strip of plastic(a)						Plastic coated textile materials		
	Polymers of ethylene				Other (582.34)	Polymers of propylene (582.33)	Tubes, pipes and hoses polyethylene (581.82)	Rigid PVC(c) (581.22)	Total
	Polymer of vinyl chloride (582.32)	Low density (582.31)	High density (582.38)	Polymer of propylene (582.33)					
	tonnes	tonnes	tonnes	tonnes	tonnes	'000 sq. m	tonnes	tonnes	
1990-91	13,127	106,221	24,958	19,457	9,360	27,874	20,323	79,133	
1991-92	13,248	110,404	24,220	20,197	9,656	28,466	24,266	84,313	
1992-93	14,491	117,842	24,270	20,531	13,664	25,653	25,771	97,252	
1992 —									
September	1,488	9,966	2,334	1,679	574	2,093	2,255	7,443	
October	1,431	10,471	2,093	1,805	891	3,050	2,723	9,433	
November	1,347	10,000	2,431	1,783	1,254	2,604	2,276	8,113	
December	1,246	8,602	1,743	1,531	1,432	2,856	1,948	7,973	
1993 —									
January	807	7,275	1,308	1,203	716	589	1,466	3,753	
February	959	9,697	1,888	1,576	1,381	2,432	1,933	7,487	
March	1,266	11,012	2,172	2,070	1,339	2,452	1,772	9,091	
April	1,077	9,765	1,904	1,539	1,140	1,560	1,999	8,208	
May	1,097	11,103	2,090	1,849	1,284	1,948	2,238	9,138	
June	1,043	10,385	2,160	1,794	1,297	2,683	2,187	9,046	
July	1,370	10,631	2,137	1,993	1,336	2,000	2,273	9,802	
August	1,372	10,799	2,131	1,938	1,286	2,559	1,863	8,224	
September	1,568	10,443	2,052	1,742	1,266	2,438	1,830	8,496	
October	1,213	10,634	1,982	1,771	1,205	2,561	1,863	7,660	
November	1,189	11,291	2,217	2,007	1,441	2,791	1,804	8,911	
1992-93: July to Nov.	7,057	50,002	11,005	8,969	5,073	11,332	12,229	42,556	
1993-94: July to Nov.	6,712	53,818	10,518	9,451	6,543	12,349	9,634	40,493	

(a) Excludes self-adhesive, floor, wall and ceiling coverings, vulcanized fibre and plastic film. Also excludes reinforced, laminated or supported with other materials.

(b) Includes linear low density polyethylene. (c) Plasticizer content 1 per cent or less by weight of PVC. Excludes electrical conduct.

TABLE 3. RUBBER PRODUCTS

Period	Conat back for retreading rubber tyres (621.21)	Strip (eg orbis-tyres) for retreading tyres (621.22)		Tubes, pipes and hoses of un- hardened vulcan- ized rubber(a) (621.41,45,49)
	tonnes	tonnes		'000 metres
1990-91		14,617		9,359
1991-92	1,021	17,781		6,884
1992-93	917	18,905		7,569
1990— December qtr		3,614		2,608
1991— March qtr	153	2,941		2,310
June qtr	168	4,263		1,739
September qtr	n.p.	3,968		1,653
December qtr	289	4,276		1,709
1992— March qtr	200	4,508		1,764
June qtr	n.p.	5,029		1,758
September qtr	195	4,667		1,836
December qtr	206	4,739		1,794
1993— March qtr	207	4,456		1,969
June qtr	302	5,043		1,970
September qtr	207	5,602		1,871

(a) Includes with fittings (eg joints, elbows, flanges).

TABLE 4. PAINTS AND OTHER SURFACE COATINGS
('000 litres)

Period	Architectural and decorative paints, enamels and clear(a)							
	Solvent thinned				Water thinned			
	Finishing coats				Plastic latex			
	Primers and undercoats (533.65)		Pigmented		Primers and undercoats (533.69)		Finishing coats	
		Full gloss (533.66)	Other (533.67)	Clears (533.68)		Flat (533.71)	Other (533.72)	Other water based (533.73)
1990-91	5,421	11,218	4,200	3,252	7,283	30,245	34,843	5,092
1991-92	5,111	9,968	3,775	3,063	8,238	29,226	37,530	4,709
1992-93	5,123	9,938	3,820	2,660	8,228	30,182	40,224	5,292
1992— September	404	788	372	221	609	2,363	3,194	454
October	436	921	352	304	844	2,892	3,708	451
November	439	844	320	250	713	2,774	3,538	528
December	372	895	319	363	615	2,524	3,459	454
1993— January	376	749	263	173	628	1,971	2,794	266
February	434	796	306	189	634	2,562	3,065	487
March	443	946	322	229	672	2,630	3,667	430
April	444	874	309	167	689	2,781	3,614	475
May	459	841	284	160	657	2,435	3,313	445
June	424	802	330	190	701	2,288	3,385	462
July	r 432	r 825	r 344	r 227	r 671	r 2,482	r 3,421	440
August	r 404	r 719	r 307	r 218	r 700	r 2,325	r 3,102	r 460
September	451	926	305	275	787	2,806	3,482	474
October	483	936	349	298	847	3,018	4,077	583
November	479	878	284	310	725	3,122	3,806	478
1992-93: July to Nov.	2,170	4,036	1,686	1,189	3,632	12,991	16,927	2,273
1993-94: July to Nov.	2,348	4,283	1,589	1,328	3,730	13,753	17,888	2,435

For December see end of table

TABLE 4. PAINTS AND OTHER SURFACE COATINGS—continued
(*000 litres)

Period	Industrial paints, enamels and clear(b)							
	Automotive				Other industrial			
	Finishing coats			Primers and undercoats (533.74)	Finishing coats			Other (533.83)
	Primers and undercoats (533.74)	Nitro-cellulose lacquers (533.75)	Other (533.76)		Primers and undercoats (533.78)	Nitro-cellulose lacquers (533.79)	Clears (533.81)	Clears (533.82)
1990-91	5,150	474	9,181	8,667	3,213	724	7,861	21,302
1991-92	4,710	429	9,209	8,309	3,383	730	7,321	20,665
1992-93	4,554	402	9,405	8,634	3,683	819	7,331	21,525
1992 —								
September	399	32	749	731	323	66	557	1,534
October	480	41	905	786	299	59	681	1,828
November	327	32	696	619	305	76	627	1,772
December	334	34	632	655	337	77	633	1,853
1993 —								
January	238	10	505	589	196	27	484	1,412
February	350	38	786	720	317	73	582	1,707
March	412	44	812	799	353	87	638	2,013
April	366	51	880	837	305	69	602	2,036
May	383	28	858	673	339	72	562	1,921
June	398	39	859	676	341	78	670	1,995
July	421	33	956	r 720	325	80	783	2,243
August	r 285	37	715	r 645	r 305	83	r 591	r 1,904
September	388	29	725	770	373	65	565	2,066
October	481	28	922	840	362	69	662	2,287
November	337	36	809	835	379	102	673	2,124
1992-93: July to Nov.	2,073	158	4,073	3,684	1,406	336	3,160	8,587
1993-94: July to Nov.	1,912	162	4,127	3,809	1,748	398	3,074	10,625

TABLE 4. PAINTS AND OTHER SURFACE COATINGS—continued
(*000 litres)

Period	Heavy duty coatings(c) (533.77)	Wood stains (oil, spirit, etc.) packed for sale or transfer out(d) (533.84)	Thinners	
			For nitro-cellulose coatings (533.56)	For all other coatings (533.57)
1990-91	12,637	1,657	1,696	6,905
1991-92	13,011	1,784	1,884	6,353
1992-93	14,590	1,925	n.p.	6,004
1992 —				
September	1,241	207	118	453
October	1,441	217	143	616
November	1,198	184	129	525
December	930	164	140	440
1993 —				
January	756	105	95	386
February	1,091	150	153	473
March	1,393	179	135	492
April	1,420	107	147	526
May	1,334	152	136	485
June	1,102	154	n.p.	542
July	r 1,308	152	n.p.	442
August	r 1,513	151	n.p.	r 447
September	992	150	130	535
October	1,208	148	159	448
November	1,177	143	151	453
1992-93: July to Nov.	6,563	914	737	2,658
1993-94: July to Nov.	6,197	750	n.p.	2,525

(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 exterior of buildings, plant and equipment etc. (d) Includes part-pigmented, Mattison and Cramson types. (e) Includes primers and undercoats, undercoat compositions, base-topping, dock paints and marine varnishes. Includes superstructure paints which are included with architectural and domestic paints.

TABLE 5. GASES

Period	Acetylene gas (511.15)	Carbon dioxide carbon monoxide and nitrous oxide(a) (522.73)	Hydrogen, rene gases, nitrogen and oxygen (522.21)
	'000 cu.m.	'000 tonnes	'000 tonnes
1990-91	3,047	89	1,538
1991-92	2,708	97	1,974
1992-93	r 2,346	r 99	1,680
1990— December qtr	701	25	412
1991— March qtr	668	23	n.p.
June qtr	782	19	406
September qtr	790	23	503
December qtr	586	24	620
1992— March qtr	553	27	465
June qtr	779	23	386
September qtr	r 798	22	391
December qtr	725	27	456
1993— March qtr	r 615	28	379
June qtr	r 708	r 23	454
September qtr	786	27	467

(a) Excludes dry ice.

TABLE 6. INDUSTRIAL CHEMICALS

Period	Hydrochloric; Chlorosulphuric (522.31)	Sulphuric; Oleum (522.32)			Ammonium sulphate Superphosphate(c)	
		Original	Seasonally adjusted(a)	Trend(b)	562.13	562.23,24,25
	tonnes	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes
1990-91	55,663	986	..	..	215	1,574
1991-92	n.p.	816	..	..	233	1,337
1992-93	62,231	868	..	..	280	1,440
1992 — September	5,046	57	71	74	n.p.	46
October	4,415	70	79	76	n.p.	96
November	3,278	76	80	77	n.p.	128
December	5,126	88	78	76	n.p.	165
1993 — January	4,195	94	79	74	28	203
February	5,368	69	60	72	25	179
March	5,454	85	74	70	25	193
April	5,345	68	66	r 69	23	117
May	5,955	71	68	r 69	22	97
June	n.p.	75	76	69	28	66
July	4,336	64	77	r 69	11	54
August	5,437	42	52	r 70	25	36
September	5,687	61	75	71	14	53
October	5,717	67	75	73	19	92
November	5,220	75	80	75	17	143
1992-93: July to Nov.	n.p.	317	..	..	n.p.	420
1993-94: July to Nov.	26,397	308	..	..	87	378

(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 per cent P equivalent.

TABLE 7. ORGANIC SURFACE-ACTIVE AGENTS(a)
(tonnes)

Period	Anionic(b) (554.24)	Cationic(c) (554.25)	Other(d) (554.26)
1990-91	19,247	4,552	1,518
1991-92	16,643	2,461	3,956
1992-93	17,606	2,100	3,939
1992 —			
September	1,420	176	308
October	1,404	163	338
November	1,697	182	322
December	1,301	145	273
1993 —			
January	1,050	191	303
February	1,495	126	297
March	1,542	206	366
April	1,531	177	340
May	1,575	155	398
June	1,545	185	362
July	1,478	157	397
August	1,696	213	427
September	1,865	193	391
October	1,737	190	343
November	2,049	212	427
1992-93: July to Nov.	7,565	916	1,600
1993-94: July to Nov.	8,825	965	1,985

(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 ionize 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 ionize in aqueous solution to produce positively charged organic ions responsible for surface activity (e.g. salts of fatty amines).
 (d) Includes non-ionic and ampholytic agents.

TABLE 8. 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)	Other(d) (554.54)
				Liquid (554.28)	Other(c) (554.29)	Liquid (554.51)	Other(c) (554.52)		
1990-91	32,725	19,215	11,820	42,547	110,034	25,457	3,906	23,912	36,682
1991-92	32,760	19,968	11,865	41,936	110,013	30,679	3,633	32,196	35,792
1992-93	35,070	21,732	12,106	42,224	97,077	32,479	3,688	33,488	34,163
1992 —									
September	2,634	2,069	978	3,692	8,138	2,653	344	2,430	3,026
October	2,917	2,157	1,148	3,234	8,188	2,632	223	2,715	3,042
November	2,585	1,649	1,003	3,277	7,507	2,978	333	2,887	3,042
December	2,532	1,334	610	3,353	6,609	2,571	353	2,912	2,455
1993 —									
January	2,088	1,540	536	2,203	6,364	1,996	285	2,843	2,034
February	2,879	1,653	1,203	2,880	8,596	2,732	144	3,298	3,019
March	3,660	2,123	1,383	4,022	8,566	3,211	275	3,558	2,760
April	3,235	1,548	898	3,414	7,721	2,783	401	2,497	2,927
May	3,443	1,992	1,323	3,562	8,447	2,693	321	2,569	3,228
June	3,157	1,961	920	3,471	8,833	3,273	251	2,506	2,980
July	3,018	2,040	1,190	4,739	9,356	3,403	265	2,814	2,992
August	3,046	1,978	910	3,968	9,479	3,079	265	2,928	3,151
September	2,896	1,975	1,190	4,004	9,254	2,935	297	3,423	2,666
October	2,789	1,961	1,070	4,624	10,350	3,005	243	2,905	3,090
November	3,041	2,006	1,222	4,591	8,730	2,765	296	3,310	2,968
1992-93: July to Nov.	14,076	9,552	5,233	19,317	41,941	13,221	1,659	13,505	14,739
1993-94: July to Nov.	14,789	9,960	5,582	21,926	47,170	15,187	1,567	15,381	14,866

(a) Includes olive and modified. (b) Includes olive soap used 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, dyestuff, textile fibres, pharmaceuticals and cosmetic products.

EXPLANATORY NOTES

Introduction

This publication is one of a series of ten 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 Standard Commodity Classification (ASCC), which was developed by the ABS to facilitate greater comparability of manufacturing production commodity statistics with import and export commodity statistics. 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. In the seasonal adjustment account has 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:

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

Manufacturing Production, Australia, Household Appliances and Electrical Equipment (8357.0) — issued quarterly

Manufacturing Production, Australia, Clothing and Footwear (8358.0) — issued quarterly

Manufacturing Production, Australia, Food, Drink, Tobacco, Stock and Poultry Food (8359.0) — issued quarterly

Manufacturing Production, Australia, Fibres, Yarns, Fabrics, Bedding and Floor Coverings (8360.0) — issued quarterly

Manufacturing Production, Australia, Building Materials and Fittings (8361.0) — issued quarterly

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

Manufacturing Production, Australia, Metal Products (8367.0) — issued quarterly

Manufacturing Production, Australia, Energy Products (8368.0) — issued quarterly

Manufacturing Production, Australia, Wood and Wood Products (8369.0) — issued quarterly

Manufacturing Production, Australia: Principal Commodities Produced, 1989-90 (8365.0) — to be released shortly

Unpublished production data is also available from the ABS Sydney office. Please contact Colin Nicholson on (02) 268 4282.

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)
- n.a. not available
- .. not applicable
- r revised since last issue
- nil or rounded to zero



For more information ...

The ABS publishes a wide range of statistics and other information on Australia's economic and social conditions. Details of what is available in various publications and other products can be found in the *ABS Catalogue of Publications and Products* available at all ABS Offices (see below for contact details).

Information Consultancy Service

Information tailored to special needs of clients can be obtained from the Information Consultancy Service available at ABS Offices (see Information Inquiries below for contact details).

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