

5 42 [4A 25]]

BOARD OF TRADE

Report on the Census of Production 1963

7 General chemicals

LONDON: HER MAJESTY'S STATIONERY OFFICE FIVE SHILLINGS NET

BOARD OF TRADE

Report on the Census of Production 1963

27 General chemicals

Presented by the Board of Trade to Parliament in pursuance of the Statistics of Trade Act 1947 (10 & 11 Geo. 6 Cha. 39 Sec. 7)

LONDON: HER MAJESTY'S STATIONERY OFFICE

1969

These notes give the main information needed for interpreting the figures in the industry reports. (More detailed information about the Census is given in a separate booklet - 'Introductory Notes': Part 1 of the Report on the Census of Production for 1963.)

GENERAL INFORMATION

Changes in the 1963 census

There were few changes resulting from amendments to the Standard Industrial Classification and only minor changes in the scope of certain industry reports compared with 1958. Any such changes are explained in the introductions to the industry reports concerned or by footnotes to the tables.

Industrial Classification

Establishments were classified to industries on the basis of major activity in conformity with the second edition of the Standard Industrial Classification (Consolidated Edition 1963, incorporating Amendment 1). Each industry was basically defined in terms of its principal products, these being of a similar nature or commonly associated in production. Normally, an establishment was classified to an industry if its sales of the principal products of that industry accounted for a greater proportion of its total sales than did its sales of the principal products of any other industry. However, where the application of this rule would have resulted in a change of classification between 1958 and 1963, the establishment was reclassified only if the sales of principal products of the newly predominant industry was more than one third greater than the sales of principal products of the previously predominant industry. This modification of the general rule was introduced for 1958 to avoid discontinuities which would result from marginal changes in sales between successive censuses.

The principle of classification by major output was also normally followed in compiling the analysis by sub-divisions of an industry.

In certain industries, classification was dealt with in a different way. Details of any non-standard treatment are given in the introductions to the relevant industry reports.

TERMS USED IN THE CENSUS REPORT

Firms were required to state the number of

Average number employed

persons on the payroll (i.e. whose National Insurance cards were held by them) on the average during the year of return, whether fulltime or part-time employees. Separate figures were required for (a) administrative, technical and clerical employees and (b) operatives (see below). Averages could be calculated from figures relating to the last week of each calendar month; figures shown in respect of the average number employed relate to the sum of these averages. Firms were also required to state the number of working proprietors (see below) where appropriate and these are included in total employment figures. Outworkers are excluded.

The figures include persons engaged in merchanting or factoring and canteen workers where particulars in respect of these activities could not be excluded from the return.

Working Proprietors

These include all persons regarded as 'self-employed' for National Insurance purposes, and members of their families who worked in the business without receiving a fixed wage or salary; but persons who worked less than half the normal number of working hours are excluded. For Great Britain, directors working in the business but not in receipt of a definite wage, salary or commission are included under this heading for 1963, but are excluded for 1958. For Northern Ireland, directors of limited companies, other than those paid by fee only, are included for both years. (Directors paid by fee only are not included in any of the employment figures for either year.)

Employees

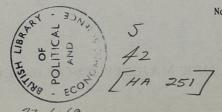
- (i) Administrative, technical and clerical employees include managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; editorial staff, staff reporters, canvassers, competition and advertising staff; travellers; and office (including works office) employees. For Great Britain, but not for Northern Ireland, they include also managing and other directors in receipt of a definite wage, salary or commission.
- (ii) Operatives include all other classes of employees, that is, broadly speaking, all manual wage earners. They include those employed in and about the factory or works; operatives employed in power houses, transport work, stores, warehouses, shops and canteens; inspectors, viewers and similar workers; maintenance workers; and cleaners. Operatives engaged in outside work of erection, fitting, etc. are also included, but outworkers (i.e. persons employed by the firm who worked in their own homes, etc. on materials supplied by the firm) are excluded. Information about the numbers of outworkers employed was collected only for the gloves industry.

Capital Expenditure

(i) New building work.

This represents the cost incurred during the year of new building and other new constructional work (including office buildings, canteens and the like used in connection with the business covered by the return but not dwelling houses for employees). The value is that charged to capital account during the year of return; it includes expenditure on new buildings or on the extension or reconstruction of old buildings, the value of work of a capital nature carried out by firms' own staff, and the cost of any newly constructed buildings purchased. The figures shown include any legal charges, stamp duties, agents' commissions, etc.

Notes - continued on pages iii and iv



27 General chemicals

This Report on the General Chemicals Industry relates to establishments engaged wholly or mainly in tar distillation and the manufacture of organic chemicals including those from coal tar, petroleum and molasses; inorganic chemicals; industrial gases; pigments; fine chemicals (including galenicals) for pharmaceutical, veterinary and other uses; chemical materials for and the products of atomic fission or fusion; and other chemicals not reported on elsewhere.

This industry corresponds to minimum list heading 271(3) in the Standard Industrial Classification (Consolidated edition, 1963).

Coal tar products, now included in this industry, were the subject of a separate report in 1958. Uncompounded surface-active material sold for use as detergents, now included in this industry, was included in the report on Soap, Detergents, Candles and Glycerine in 1958, and steroid preparations, also included in this industry in 1963, were reported in the Pharmaceutical Preparations Industry in 1958.

In interpreting the data in the tables it is essential to bear in mind the notes and definitions which appear on pages (ii), (iii) and (iv).

LIST OF TABLES

able No.	Title I make to successione and as above the sale at vinise to	Page
1	Industry summary: United Kingdom. Estimates for all firms, 1958 and 1963	27/3
2	Analysis of larger firms by sub-divisions within the industry, 1958 and 1963	27/4
3	Analysis of larger firms by size of enterprise within the industry, 1963	27/6
4	Percentage analysis of employees, by age and sex, all firms, 1963: United Kingdom	27/7
5	Sales of principal products of the industry by larger firms, including sales by establishments classified to other industries, 1958 and 1963	27/8
6	Sales of principal products of the industry by establishments classified to other industries, 1958 and 1963	27/1
.7	Sales of other than principal products by larger firms in the industry, 1958 and 1963	27/2
8	Production of certain principal products of the industry by larger firms, including production by establishments classified to other industries, 1958 and 1963	27/2
9	Purchases of selected principal products of the industry by larger firms, 1963	27/2
10	Purchases by larger firms in the industry, 1954 and 1963	27/2
11	Transport costs and employment of larger firms, 1963	27/2
12	Payments for certain services, etc. by larger firms, 1963	27/2
13	Percentage analysis of twelve-month periods covered by returns from larger firms, 1963	27/
14	Sales of all parts of machinery and plant by larger firms, including sales by establishments classified to other industries, 1958 and 1963	DOE NO APP

TABLE 1 Industry summary: United Kingdom Estimates for all firms, 1958 and 1963 (a)

		Unit	1958	1963
Number of enterprises	STANGEN CONTROL NO	No.	618	557
Number of establishments			871	857
Gross output		£,000	603,413	876,000
Net output			255,496	387,354
Net output per head		2	1,849	2,799
	goods produced and work done	£'000	559,558	779,876 (b)
Sales and work done	merchanted goods and canteen takings		43,499	96,908
Customs and Excise duty (net)		"	90 (341,328)	13,098
SELECTED TESTED OFFICE	materials for processing and packaging, and fuel] 202 2124	368,363
Purchases	goods for merchanting and canteen purchases	og berind	326,913(c)	84,129
Payments to other	for work done on materials given out	RT webob	734	3,404
organisations	for transport	" "	19,853	20,044
Stocks and work in progress		7(3.68	Strain at inco	in Parito
Total stocks and work in	change during year	na	- 61	- 391
progress	at end of year		90,744	116,770
	change during year	"	+ 514	- 1,895
Goods on hand for sale	at end of year	н	34,403	47,474
	change during year	n a	- 158	+ 1,112
Work in progress	at end of year	gas and nogh	9,991	16,225
	change during year	san Tombad	- 417	+ 392
Materials, stores and fuel	at end of year	grafia ogó	46,350	53,072
	f total, including working proprietors	Th.	138.1	138.4
Average number employed	operatives	and and pand	92.5	86.7
Satiset Captail Cappail	other employees (d)	20,000	45.4	51.2
	of operatives	£,000	58,345	69,834
Wages and salaries	of other employees (d)	2014 400	40,000	57,104
Employers' contributions to Na pension schemes, etc. (e)	Contract to the self of the self of the self-		300, 344,008	12,706
Capital expenditure (f)		ina saltus	The carrol	is but some
Total		"		64,534
New building work			19,053	8,780
Land and existing buildings		11	Sand and	- 666
Plant and machinery (g)	usesday balkage	33 33 " 23	77,956	54,667
Vehicles (g)			1,703	1,753

⁽a) For 1963, estimates for small firms and for firms not making satisfactory returns accounted for about 3 per cent. of the total figures in which they were incorporated. (For 1958 the comparable figure was also 3 per cent.) A summary of the detailed returns received is given in Table 2.

⁽b) Including services rendered to other organisations (amounts charged for hiring out plant, machinery and other goods, for providing transport, or for technical or other services rendered).

⁽c) Including duty paid, less drawbacks, rebates, etc.

⁽d) Administrative, technical and clerical employees.

⁽e) Including pensions and gratuities paid other than from pension funds.

⁽f) Excluding expenditure for establishments not yet in production.

⁽g) Acquisitions less disposals.

TABLE 2 Analysis of larger firms by sub-divisions within the industry, 1958 and 1963
Firms employing 25 or more persons: United Kingdom (a)

The bear and seed	s Anto		Sub-	divisions of	the indust	try (b)
	mary Spice Linguist, and Tomas 1988 and 1883	Unit	Inorganic 0	chemicals	Organic o	hemicals(c)
	days court by man-distribute at the first	tislest	1958	1963	1958	1963
Number of enterprises	(d)	No.	60	51	33	41
Number of establishme		н	129	114	51	77
Gross output	persons an adversa as the sequence in the	£,000	170,683	174,338	151,884	308,122
Net output	Anispanens plantiforms astrong that		64,676	73,230	58,633	124,783
Net output per head	coupling the state at the second of the term	2	1,521	2,226	2,321	3,138
238.380	goods produced and work done	£,000	162,972	158,206(e)	141,613	275,212(e)
Sales and work done	merchanted goods and canteen takings	н .	8,228	17,586	10,038	32,079
Sales of characterist	T Allegan School on the same of the A	"	117,281	117,863	93,570	181,599
Index of specialisat		Per cent.	72	74	66	66
Customs and Excise du		£,000	311 101]	- 2		12,729
customs and Excise di	materials for processing and			77,237	1	135,501
Purchases	packaging, and fuel goods for merchanting and canteen	25 H 3	93,070	15,455	90,404	25,492
ENR. 7 Topopolis	for work done on materials given out		11	8	67	2,846
Payments to other organisations	for transport	3664	11,290	7,770	3,497	6,791
Stocks and work in p		y anima	Change		4	
Goods on hand	change during year		- 208	-1,325	+ 221	+ 544
for sale	at end of year	H	8,856	7,728	10,227	18,530
August production of the	change during year		- 309	- 130	+ 12	+ 287
Work in progress	at end of year		1,625	1,991	2,227	5,027
Materials, stores	change during year		- 1,636	- 639	+ 718	+ 21
and fuel	at end of year	"	14,988	11,516	11,053	16,718
100 00 310 4	total, including working proprietors	No.	42,520	32,904	25,261	39,762
Average number	operatives	•	30,745	21,703	17,276	24,655
employed	other employees (j)	11	11,772	11,187	7,985	15,094
800,53	of operatives	€,000	19,081	17,029	11,613	20,893
Wages and salaries	of other employees (j)		10,691	12,279	7,118	18,250
64,834	operatives	2	621	785	672	847
Wages and salaries per head	other employees (j)		908	1,072	891	1,209
Employers' contribut	ions to National Insurance (k)	£,000		1,066	galiais. by	1,348
Employers' contributetc. (1)	ions to private pension schemes,			1,752	ed doct bas	3,059
Capital expenditure	(m)		2,826	1,021	3,647	1,847
New building work		н		139		58
Land and existing	acquisitions	A December 1	ONE LETON	772	Sec (Side)	145
buildings	disposals	H THE STATE OF THE	10 746	7,343	26,373	19,277
Plant and	acquisitions		10,746	254	98	347
machinery	disposals	ander a	146	594	446	298
Vehicles	acquisitions	900 1101	457	205	72	74
	disposals		97	205	12	

For notes to this table - see page 27/7

			S. C.	h-diwi-i	of the day	W-10 (A) (B)	V+10035 . NO	All on	Sance B
	gments	chem	ceutical nicals	distilla	of the indu	Remain indu		To	otal
1958	1963	1958	1963	1958	1963	1958	1963	1958	1963
21	20	22	15	23	20	96	104	240	224
32	30	30	23	58	50	182	207	482	501
27,695	38,035	32,944	32,020	38,960	37,318	162,085	263,136	584,253	852,969
11,064	16,628	17,255	16,541	8,227	9,023	87,511	136,965	247,366	377,170
1,756	2,216	1,589	2,051	1,351	1,673	2,049	3,332	1,850	2,799
27,342	36,611(e)	31,299	30,437(e)	37,699	34,941(e)	140,869	223,964(e)		759,372(e)
225	1,378	1,304	917	846	2,887	21,472	39,513	42,113	94,360
25,013	31,440	19,919	17,318	36,245	25,689	(f)	(f)	(f)	(f)
91	86	64	57	96	74	238.11	100	90	86
• ***	21 1 11		- 51		1,321	274,9	- 1,245	200	12,753(h)
15,585	18,921	15,312	15,293	29,214(i)	22,968	72,965 {	88,758	316,550	358,678
14	1,391], \$6	709	Jan 1980	2,768		36,102		81,918
6	12	167	27	135	258	324	163	711	3,315
850	757	288	268	1,483	1,081	1,814	2,851	19,223	19,517
+ 229	+ 1	+ 180	- 132	+ 194	- 458	- 118	- 475	+ 498	- 1,845
2,232	2,899	2,224	2,494	2,710	2,948	7,062	11,627	33,311	46,225
- 101	+ 46	+ 161	+ 798	+ 221	- 52	- 138	+ 133	- 153	+ 1,082
704	872	2,698	3,390	809	1,419	1,611	3,101	9,675	15,799
- 190	- 326	+ 76	+ 765	+ 99	+ 102	+ 529	+ 459	- 403	+ 382
4,836	5,853	2,514	2,856	1,769	1,604	9,716	13,130	44,875	51,677
6,301	7,504	10,860	8,065	6,089	5,394	42,709	41,107	133,740	134,736
4,487	4,998	6,680	4,796	4,488	3,903	25,995	24,643	89,671	84,698
1,814	2,503	4,180	3,269	1,601	1,489	16,713	16,452	44,065	49,994
2,797	4,065	3,473	3,033	2,814	3,019	16,766	20,163	56,544	68,202
1,685	2,706	3,693	3,432	1,250	1,370	14,327	17,029	38,764	55,770
623	813	520	632	627	773	645	818	631	805
929	1,081	884	1,050	781	920	857	1,078	880	1,116
0.00	252	8	199	1	169		1,282		4,315
.881	379		439		153		2,312		8,094
584	569	1,032	1,629	169	289	10,187	3,194	18,445	8,549
• 977	4		38	K.	3		269		509
60.000	120	unional part • paren	21		4		96		1,158
2,697	2,584	2,020	1,506	1,253	599	32,959	22,759	76,047	54,068
5	34	13	14	60	7	253	184	575	839
39	40	115	82	88	55	942	1,291	2,087	2,361
7	13	57	48	12	22	193	291	439	654

TABLE 3 Analysis of larger firms by size of enterprise within the industry, 1963

(i) Output, employment, capital expenditure and stocks

Firms employing 25 or more persons: United Kingdom

Average number employed by the enterprise in the industry (a)	Enter- prises	Estab- lish- ments	Average number employed (a)	Gross output	Net output	Net output per head	Capital expendi- ture (b)	Total value of stocks and work in progress at end of year
SAN ES	Number	Number	Number	€,000	£,000	3	£,000	\$,000
25-49	57	64	2,114	12,061	4,139	1,958	525	1,495
50-99	56	62	3,797	20,230	7,790	2,052	586	3,517
100-199	40	57	5,468	32,303	11,820	2,162	919	5,490
200-299	18	38	4,446	41,202	12,148	2,732	1,172	6,538
300-399	14	20	5,109	37,450	15,793	3,091	1,338	6,341
400-499	5	9	2,225	10,207	3,677	1,652	414	1,735
500-749	10	25	6,148	33,342	13,345	2,171	6,091	5,399
750-999	5	22	4,143	33,365	10,330	2,493	851	5,614
1.000-1.499	5	30	5,891	35,287	8,901	1,511	2,111	6,409
1.500-2.499	4	20	8,858	75,918	32,385	3,656	8,819	8,849
2,500-3,999	3	12	9,475	69,872	23,961	2,529	4,027	11,290
5.000-7.499	3	25	16,627	101,667	45,268	2,723	3,941	18,447
7,500 and over	4	117	60,435	350,067	187,613	3,104	32,042	32,577
Total	224	501	134,736	852,969	377,170	2,799	62,837	113,701

(ii) Employees, wages and salaries, and employers' contributions

Firms employing 25 or more persons: United Kingdom

	Employees		Wages and salaries		Emplo contrib	yers'	Wages and per	salaries head
Average number employed by the enterprise in the industry (a)	Oper- atives	Others (C)	Oper- atives	Others (C)	National Insurance (d)	Private pension schemes, etc. (e)	Oper- atives	Others (c)
286 71 808	Number	Number	£,000	£'000	£,000	\$,000	2	2
05.40	1.378	720	938	819	61	65	681	1,137
25-49	2.298	1,488	1,567	1,521	111	116	682	1,022
50-99	3,422	2,033	2,520	2,119	173	177	737	1,042
100-199	2,587	1,855	1,922	1,953	138	192	743	1,053
200-299	3.258	1.851	2,501	1,940	147	185	768	1,048
300-399	1.570	655	984	614	62	49	627	937
400-499		1.894	3.379	2,114	201	234	794	1,116
500-749	4,254 2,798	1,345	2,139	1,181	125	100	764	878
750-999	3,396	2.495	2,753	2,480	194	240	811	99
1,000-1,499		2,712	5.247	3,070	283	847	854	1,13
1,500-2,499	6,146	3.454	5,206	4,038	289	773	865	1,16
2,500-3,999	6,021	7.078	7.721	8,265	526	1,497	809	1,16
5,000-7,499 7,500 and over	9,549 38,021	22,414	31,323	25,657	2,007	3,620	824	1,14
Total	84,698	49,994	68,202	55,770	4,315	8,094	805	1,11

⁽a) Including working proprietors.

TABLE 4 Percentage analysis of employees, by age and sex, all firms, 1963: United Kingdom (a)

Ages	Males	Females	All employees
Alog 8	Per cent.	Per cent.	Per cent.
Under 18	1.	2	3
18 and over	78	19	97
All ages	79	21	100

Source: Ministry of Labour

(a) The percentages relate to the numbers employed (excluding working proprietors) at mid-June, 1963, in the 'Chemicals and Dyes Industry - Minimum List Heading 271'.

Footnotes to Table 2.

(a) The following information relates to small firms (employing fewer than 25 persons) in this industry. It includes an estimate for small firms not making satisfactory returns, which account for 3 per cent. of the employment shown for 1963 and 5 per cent. for 1958.

	1958	1963
Number of firms	385	352
Average number employed:		
Working proprietors	} 4,155 {	414
Other persons employed	1 1,100	3.053

- (b) The method of classifying returns to sub-divisions of the industry is explained in the notes; the characteristic products of each sub-division are identified in Table 5.
- (c) Firms wholly or mainly engaged in the manufacture of cyclic hydrocarbons, pure or refined are classified to the organic chemicals sub-division for 1963 but for 1958 are included in the coal tar distillation sub-division.
- (d) The sum of the figures for the sub-divisions exceeds the total for the industry to the extent that enterprises made returns for more than one sub-division.
- (e) Including services rendered to other organisations (amounts charged for hiring out plant, machinery and other goods, for providing transport, or for technical or other services rendered).
- (f) Characteristic products relate only to specific sub-divisions of the industry.
- (g) For sub-divisions of the industry, this is the ratio of sales of characteristic products to total sales of goods produced and work done. For the industry as a whole, this is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.
- (h) Customs and Excise duty paid on goods of firms' own manufacture where these were sold duty-paid was £14,691,000. The value of rebates in respect of alcohol used in the manufacture of medicinal preparations and of drawbacks received in respect of products exported in 1963 was £1,937,000.
- (i) Including Customs and Excise duty (net) of £1,349,000.
- (j) Administrative, technical and clerical employees.
- (k) Including both flat rate and graduated contributions.
- (1) Including pensions and gratuities paid other than from pension funds.
- (m) Excluding expenditure for establishments not yet in

⁽b) Acquisitions less disposals.

⁽c) Administrative, technical and clerical employees.

⁽d) Including both flat rate and graduated contributions.

⁽e) Including pensions and gratuities paid other than from pension funds. These amounted in total to £1,080,000.

TABLE 5 Sales of principal products of the industry by larger firms, including sales by establishments classified to other industries, 1958 and 1963 (a)

ndustry		19	58		1963		
sub- ivision (b)	The later than a plant to	Quantity	Value	Quantity	Value	Enter- prises	Entrie
	INORGANIC CHEMICALS	1340	\$,000		£'000	Number	Number
01	Radioactive and isotopically labelled elements and compounds	2017 40				2.15.00	
	Artificially enriched Other	}	(c){	2,152	1,057 226	•	:
10.15	Other than radioactive	gaffisatsq a		2,332		5.53	
01	Acids	Th.tons		Th.tons		1 75	
	Hydrochloric (as at 1.14 specific gravity)	202	2,066	276	2,620	16	18
	Hydrofluoric, solutions and anhydrous, in terms of anhydrous	3.8	527	6.0	840	6	6
	Sulphuric (in terms of 100 per cent. acid) (d)	1,242	13,217	1,479	12,266	28	45
	Nitric (in terms of 100 per cent. acid)	SLEY YES		162	4,063		9
561 1	Phosphoric (in terms of 100 per cent. acid)	}	6,618	19.5	1,700		
	Other inorganic acids	J			1,286	10	11
01	Aluminium compounds (other than bauxite and abrasives)	SERVICE OF	last Kings				
	Alums (sodium, potassiums and ammonium)		1000	3.4	103 151	} 5	5
	Aluminium oxide	S TORRIBE N	in the	1 72 1 12 2 2			
50	Anhydrous (alumina)		8,019		3,111	*	
	Hydrated (aluminium hydroxide)	olions ass	8 (3)	31.5	996		5
ai prai	Other inorganic aluminium compounds			5 TANK	2,731	7	8
01	Ammonia	il lo see a	T (8)	1 138			
9658	Liquor (in terms of 100 per cent. ammonia) (d)	81.0	2,960 488	} 72.0	1,770	13	25
2.2 my Sm	Anhydrous	101	(c)	208	7,386	*	10
01	Ammonium compounds, excluding phosphates and sulphate	philips agolys	2,638	• • • • •	5,706	16	24
01	Barium salts and compounds (excluding barytes and natural barium carbonate and pigments)	31.6	1,097	27.5	1,380	11	12
01	Bleaching materials	And the special		1	202.		
927	Bleaching powder (chloride of lime)	bos anova	9 (4)	16.9	589		
SpfaV s Spoot	Hydrosulphites and related compounds, inorganic and organic	37.7	4,291 {	{ 12.2 ··	1,835 953	} 6	6
ensy facus	Hydrogen peroxide (all strengths, in terms of 100 per cent. hydrogen peroxide)	e southard	4 (1)		2,085		
	Other inorganic bleaching materials, (including percarbon- ates, perborates, persulphates, sodium peroxide and compounded bleaching agents, etc.)	166	5,885	194	6,277	12	15

TABLE 5 (continued)

Industry		19	58		1963			
sub- division (b)	essing esiat viltares color	Quantity	Value	Quantity	Value	Enter- prises	Entries	
radous I	INORGANIC CHEMICALS (continued)	Th. tons	£'000	Th.tons	£'000	Number	Number	
	Other than radioactive (continued)		(Josual) n	eal avitoko	sher cods i	piloto		
01	Cadmium salts and compounds, including plating salts but	8.88			24603	1	12	
0.1	excluding phosphates and pigments	2.5	982	** principals	888	11	11	
01	Calcium salts and compounds (other than phosphates)			aredrine b	o stime on		10	
	Carbide	1	enedural (on electe	3,163			
1	Chloride	190	6,917(e)	63.0	1,058	8	8	
25	Other sorts, not elsewhere specified	1		35.0	1,261	13	15	
01	Carbon disulphide	65.6	3,338	88.3	4,008	*	*	
01	Chlorine	144	4,605	209	4,916	5	5	
01	Cobalt oxides, salts and compounds,		4,000	203	4,510			
	inorganic, excluding phosphates and pigments		(c)	1.9	1,035			
01	Copper sulphate	32.6						
	1 61 70 200 21	32.0	1,950	25.4	1,867	5	5	
01	Fuller's earth, activated Lead compounds		(c)	- 450	1,146	70.		
	Lead oxides	h	(mastant)	25.9	2,207	6	10	
	Other inorganic lead compounds	\$11.2	ared to 1	eror unod	F. F. Tild Co.			
	excluding pigments (other than white lead, dry and ground)	28.1	2,736	2.5	324	11	11	
03	White lead, dry and ground,	1 20.1	2,130	130) (200)	amabad - 3			
	including ground in oils, in terms of dry content (other than plasti-							
	cisers containing white lead)	1 5-86		7.5	726	21	22	
01	Magnesium salts and compounds (excluding phosphates)		4,322	249	7,285 456] 17	21	
01	Mercury, refined, and mercury	1		3 . 1000 110		1		
	salts and compounds, inorganic (excluding phosphates)		(-)	eq canddan	1,054			
01	Phosphorus compounds	1	(c)	35.5	20100000			
	Ammonium phosphates	J 0.22		12.5	569			
	Calcium phosphates		(f)	26.5	1,515	6	6	
	Sodium phosphates	1			10,848		*	
	Other inorganic phosphorus compounds (other than rare	}	(c)	See Westerland	and the same			
	earth, and silver phosphates)		-	15.5	1,578			
01	Potassium salts and compounds, inorganic, (excluding phosphates		1 3/67 200	the term in the	1			
	and compounded preparations for photographic purposes)	8.6	999	27.9	1 000	14	10	
01	Rare earth compounds, inorganic	8.0	999	27.3	1,983	14	1 16	
	and organic (including phosphates)	0.4	506	0.5	505		20.	
01	Sodium salts and compounds (other than water treatment compounds)			artimectu	er man rea	6		
	Carbonate, including soda		T. 2017	1 171	14 000	-	1	
	crystals and soda ash	1	100 901	1,171	14,928	7	8	
	Cyanide	84.2		26.8	2,254			
	Hydrogen carbonate (bicarbonate)		40,183	72.1	1,287			
	Hydroxide (caustic soda) Other and unclassified inorganic			855	18,704	12	13	
	sodium compounds (excluding	1-1-2		29.0	2153.04			
	phosphates) Sulphate of all grades (including	1		388	10,784	24	30	
	salt cake)	104	1,180	113	1,070	10	12	

TABLE 5 (continued)

Industry		19	58		1963		
sub- division (b)	rates to care to care and a care and a care a	Quantity	Value	Quantity	Value	Enter- prises	Entries
190000	INORGANIC CHEMICALS (continued) Other than radioactive (continued)	Th.tons	£,000	Th.tons	£,000	Number	Number
01	Sulphur	73.6	938	organia ista	859	8	10
01	Tin salts and compounds, inorganic		345(g)	0.8	541	8	9
01	Zinc salts and sulphate		(c)	sed compos	1,392	19	20
01	Inorganic chemicals, not elsewhere specified			(ae	Carbide		
	Metallic	1	ſ		14,526	36	44
	Other	}	27,574 {	IN No. 1	4,572	28	35
	Total inorganic chemicals, including white lead, dry	141	144,386(g)	275	178,439	13.15.	
	ORGANIC CHEMICALS		236307005	on policels	5 .0000370 01000010		
	Primary hydrocarbons, synthetic or natural other than compressed gases or for use as fuel	2,53	34,035	s gan an		272	49
02	Aliphatic hydrocarbons			4	suotosiSS tu		10
91	C ₁ hydrocarbons, total (methane)	1)	1	33.4	1,404		
	C2 hydrocarbons, total (ethane, ethylene, acetylene)	91.2	9,154	234	13,007	5	5
10 m	C ₃ hydrocarbons, total (propane, propylene, etc.)		asser of	10.2	311		10.
	C ₄ hydrocarbons, total (butane, butylene, butadiene, etc.)	96.7	3,280(h)	83.6	6,555		
	C ₅ and higher aliphatic hydro- carbons total (including propylene tetramer, etc.)			47.6	1,482		1.
02	Cyclic hydrocarbons, pure or refined		125 116 128 1	ti "kbisoq (ugʻzençad)	os See Ell Taribels		
	Benzoles	316	12,901	203	8,593	26	33
	Toluoles	35.0	1,968	52.3	2,568	23	29
	Xyloles	23.4	2,240	43.6	4,732	21	27
	Naphthalene	59.4	1,900	73.9	2,169	27	37
	Naphthas (solvent and heavy) Other primary cyclic hydro-		1,585	31.0	1,081	24	29
	carbons, pure or refined (ex- cluding phenol and crude coal tar products)		1,136 {	16.0	572 776	} 16	- 17
	Other organic chemicals			(nastadana)	ornes spore		
02	Radioactive and isotopically labelled elements and compounds		151	Anthustres Anthustres Anthustres	374		
	Other than radioactive		Cabanoga	estment of	1 1578W CS		
02	Acids Acetic (in terms of 100 per	1	ships	gerbulous San Palle, El	Alareys alareys		
	cent. acid)	34.2	4,273	43.4	4,570	7	7
	Citric	1.8	454	2.2	467		
	Salicylic Formic	1.8	454	9.4	846		
	Tartaric		2 507	0.9	201		
	Other organic acids (other than crude tar acids)	101	3,567	19.5	3,423	23	25

TABLE 5 (continued)

ndustry		DE .	198	8		1963		gateala.	
sub- ivision (b)		Value Danstiev Value	Quantity	Value	Quantity	Value	Enter- prises	Entries	
sadaski	Other or	HEMICALS (continued) rganic chemicals (continued) than radioactive (continued)	Th.tons	£'000	Th.tons	£'000	Number	Number	
02	Alco	phols thyl alcohol	4,90	1 656 KT 1005	n linesis — siinbyt			4.6	
	Pipper F	Duty-paid	1	[3.0	9,139			
		Duty-free	103	8,471	85.0	4,683			
	Pı	ropyl alcohols {	10.0	970 1,105	} 75.0	3,082	5	5	
	В	ityl alcohols	14.9	1,528	45.3	3,900			
		igher fatty alcohols (i.e. odecyl alcohol and higher	2.4	375	4.5	946		-	
	Me	ethyl alcohol) 3 3	1	199	5,289			
	sı	ther alcohols (excluding alphonated or sulphated	}	9,184(g)	70.0	7 505	10	12	
	100000000000000000000000000000000000000	lcohols)	J	1	76.0	7,525	10	12	
02		lulose esters and ethers cluding cellulose nitrate)			e dischi	00 01 04 3T		2/5	
	Ce	ellulose acetate flake	1	ſ	44.4	9,014			
	01	ther and American in the American	}	(i) {	14.6	4,409	5	8	
02		prinated derivatives of cocarbons	83.2	6,014	Lineal one	17,451	11	12	
02	sul	ergent alkylates (excluding phonated products)	81.0	5,377	55.8	4,109	. 5	5	
02		ers, not elsewhere specified utyl acetate	h	1	5.5	700	5	5	
		thyl acetate	36.8	5,862	7.8	858			
		ther			14.4	3,448	22	26	
02	Form	maldehyde and paraformalde- e, in terms of 100 per cent. maldehyde	39.4	3,045	34.0	2,363		6	
02	Glyd	cols, glycol ethers and their ers (other than anti-freeze tures) (j)	T. Carl		15,810	tra biografi Teauld o			
		thanediol (ethylene glycol)	1	-	47.0	4,745		.*	
	P	ropanediol (propylene glycol)	26.2	4,769	13.3	889			
	0	ther			27.1	3,947	11	12	
02	Alka	aline earth and heavy metal	8.38	(k)	8.3	1,667	8	9	
02	Hex	amine	LENS SET		4.1	490			
02	Keto	ones	0.58	2025.	dani) gila	200 FE 600			
	A	cetone	50.7	3,267	71.3	3,539	6	6	
	0 m	ther, including iso-butyl ethyl ketone and ethyl methyl	10.1	tyma, com s		- and			
		etone		2,748	40.0	4,799	10	10	
02		hylated spirit, mineralised		(i)	4.4	363	12	100	
02	Met	hyl methacrylate (monomer)	1	100000	27.7	3,878	3 14		
02	Phen	nol	17.8	2,479	48.3	4,232	12	12	

TABLE 5 (continued)

Industry sub-		19	958		1963			
division (b)	TATES MODEL NOTTHEN MODELS	Quantity	Value	Quantity	Value	Enter- prises	Entries	
andreis.	ORGANIC CHEMICALS (continued)	Th.tons	\$,000	Th.tons	£,000	Number	Number	
	Other organic chemicals (continued)	(503(3)2)) (183188)	a stragge	sc10		
	Other than radioactive (continue	d)	(10000000000000000000000000000000000000	90175501	45 45 E	20		
02	Phthalic anhydride	29.2	3,840	44.2	3,553		5	
02	Sodium compounds, organic		(1)	8.2	909	13	15	
02	Styrene (monomer)	4. A	(i)	60.9	5,113			
02	Surface-active material including wetting and emulsifyi agents, etc. sulphonated or sulphated alcohols and oils, quaternary ammonium compounds,			a Lories a Lories	de la	57		
	etc. but excluding scouring preparations and compounded materials primarily for washin	σ	74-750312	icicals (s)	el sedgiR aliyebbb			
	purposes in powder, liquid, paste or other forms	46.6	6,108 66	} 97.2	11,838	47	59	
02	Vinyl acetate (monomer)		1 [6.9	821			
02	Vinyl chloride (monomer)]}	(i) {	101	7,124			
02	Organic chemicals, not elsewhe specified (excluding organo- inorganic compounds for	re	tract (aranti	bus evers	paikalbai		150	
	medicinal use)		1 1 1 1 1 1 1	1 Diesese.	secialie)			
	Metallic		2,554(m)		1,745	15	16	
32	Other and unclassified	•••	41,223(n)	oware.sab	45,129	55	65	
	Total organic chemicals		151,594(g)	Sylater (234,827		.,	
	PIGMENTS		tel tipega	aradeoule.	on Lateral		30	
03	Earth colours, processed or powder (including ochres and natural iron oxide but excluding blacks)		611	23.7	848	7	7	
03	Inorganic pigment colours, pure or reduced, dry and in pulp form		Talliano	over one a	GEORES Servial Ceky	10.	38	
9	Chromium compounds, (including mixed pigments, e.g. lead greens and zinc greens)	9.7	2,445	10.2	2,163	9	13	
	Iron blues	1.5	441	1	10) \$201.50		50	
4 1	Other, except lead oxides	6.8	1,231		3,176	12	.13	
-	Unclassified		316	Average in	387			
03	Iron oxides, synthetic (o)	12.4	829 (g)	10.9	774	8	8	
03	Lithopone, dry	34.5	2,037	23.8	1,294			
03	Synthetic organic pigments, pure o reduced		-,	Th.cwt.	20308 40 000 000		200	
	Pigment dyestuffs (including toners)	80.0	5,438	114	6,710	15	18	
		Th.tons		Th.tons	5957433			
	Lakes	1.0	503	1.3	555	10	12	
	Unclassified	1 1	273		228			
03	Titanium dioxide	89.3	15,045	125	20,378		*	
03	Zinc oxide	44.2	2,685	40.2	2,821	8	11	
	Total pigments, excluding white lead, dry		31,854	Markin Association and	39,334			

TABLE 5 (continued)

ndustry	2507	19	58		1963	1963		
sub- livision (b)	Value Country Value Beter-	Quantity	Value	Quantity	Value	Enter- prises	Entries	
1983000	COMPRESSED GASES NOT ELSEWHERE SPECIFIED (INCLUDING LIQUEFIED AND SOLIDIFIED)		£'000	MD) 23A378 Delightory Ges type	€,000	Number	Number	
04	Inorganic Carbon dioxide and hydrogen		3,709	has in to r	6,572	12	22	
04	Other compressed gases inorganic and organic		20,772	oues grabal	34,112	10	20	
	Total compressed gases		24,481		40,684	2 4. ·		
	PHARMACEUTICAL CHEMICALS (chemicals for therapeutic or prophylactic (including veterinary) use, unmixed		5.704	landingson	naime and sacyroli-c	12000	26	
	and uncompounded, including organo- therapeutic extracts of glands, etc., steroids, etc. and vaccines, etc., in	-5,6325	ALTE MONENTAR	este (inches)		sarger surface		
	all forms but excluding other products put up in measured doses)		8.120 j	beill co. Albhane		a lagar		
05	Acetylsalicylic acid (aspirin, other than aspirin tablets) and salicylates	Th.kg.	1,647	Th.kg.	1,778	10	10	
05	Alkaloids, their salts and other derivatives	3,803	1,041	4,000	1,110			
	Morphine, codeine, ethyl morphine and other derivatives of morphine	26.7	1,524	29.2	1,572	7	7	
	Other and unclassified alkaloids		1,031	43.7	504 245	12	12	
05	Anaesthetics, general and local, not elsewhere specified (other than compressed gases)		320(p)	Caragaria Caragaria	3,350	11	17	
05	Antibiotics			ASSESSED	in describe			
	Penicillin, its salts and derivatives	96.5	4,869	120	1,549 806	} 5	5	
	Streptomycin and dihydro- streptomycin (in terms of base)	82.4	2,831	87.1	606			
	Other antibiotics	10.9	906	40.1	1,524 851	10	12	
05	Barbituric acid, its salts and derivatives	292	737	191	603	5	5	
	graphic paranep	Mn.inter- national units	1,287	Mn.inter- national units	arteris .		1.5	
05	Insulin (all forms and solutions including sales in measured doses)	4,253	1,545	3,858	1,344	5	5	
05	Other organo-therapeutic extracts of glands or other organs or of their	9,8	1000	20,20,20	16:00 E			
	secretions (all forms including sales in measured doses)		(k)		786	11	13	
05	Saccharin, including substances of a like nature or use (other than saccharin tablets)		1,813		457			
05	Steroid preparations (cortisone, hydrocortisone, etc.) hormones, and	8.9	3.13	a Photographic	S443.16. 24			
	similar products having analogous physiological properties, not else- where specified (all forms including	4,42	300	12 1 10 10 10 10 10 10 10 10 10 10 10 10 1	ration along	of the latest		
	sales in compounded forms or measured doses)		624(q)	Th.kg.	9,077		26	
05	Sulphonamides (other than tablets)	8.71 {	1,988	883	1,630	10	10	

Industry sub-	£907.	19	58		1963		(Cittella
division (b)	antique called villaged during	Quantity	Value	Quantity	Value	Enter- prises	Entries
THE SEC.	PHARMACEUTICAL CHEMICALS (chemicals for therapeutic or prophylactic (including veterinary) use, unmixed and uncompounded, including organotherapeutic extract of glands, etc., steroids, etc. and vaccines, etc., in all forms but excluding other products put up in measured doses) (continued)		€,000	THE SE AS TO SELECT A	£'000	Number	Number
05	Vaccines, sera and other serological products (all forms including sales in measured doses)		0.000		348643	Date .	
05	Vitamins, provitamins, etc., their salts and esters		3,399 5,587	g bar. mag	5,144 2,703	11	14
05	Organo-inorganic compounds for medicinal uses, not elsewhere specified		5,581	(a) Similal Salysqozq v Salysqozq v Salysqozq	387	11	14
05	Other pharmaceutical chemicals, not elsewhere specified	}	7,256(g)	le /g to are	9,906	33	39
	Unclassified pharmaceutical chemicals	24.57		Sala o galba Yasana a	345		*
08	Total pharmaceutical chemicals	906.16	36,077(g)	300 20188 7	45,165		
- 1	MISCELLANEOUS CHEMICAL PRODUCTS	Th.tons	5/12/08/2002	Th.tons	phine, co		
06	Synthetic rubber {	7.5	1,809 452	} 122	23,634	9	9
08	Additives for liquid fuels and lubricating oils (vegetable and mineral), prepared		1, (250) 1, 467, 1, 366)	THE TETROS	- 12012801 Syankeri Sen Andre	200	786
200	Anti-knock compounds Other (e.g. oxidation inhibitors,		(r)	80.5	19,012	1 (e.e.) •	*
08	viscosity improvers) Anti-freeze mixtures (excluding	••	7,260 (k) {	38.5	7, 199 2, 228	13	14
08	pure ethylene glycol) Bituminous products (other than for use as paints)	8.61	(x) {	enis.	838	32	33
	Bituminous emulsions	35.3	740	79.8	1,883	12	14
	Other bituminous compounds	42.4	1,367	46.2	2,218	21	23
08	Blacks, mineral and carbon	Carry Tea					
	Furnace black	95.1	7,121	125	8,354	7	7
08	Other, and unclassified including thermal and lamp black Carbons, decolourising and other	8.8	480	5.4	337	7	. 7
08	activated Catalysts prepared for industrial	4.0	549	8.1	943	20*	
	processes		2,231	formering (soldbar)	4,430	12	13
08	Ceramic colours, glazes and frits Ceramic colours		To appoint t	rous gratui	ent anima	048 lb	10.3
	For glass and clayware	0.7	659	0.9	876	7	8
	For vitreous enamels	0.3	762	0.2	207	6	7
	Ceramic glazes for clayware	14.4	1,092	15.4	1,105	9	10
	Frits for vitreous enamels		galbaltoni i	atol Tir) i	al Massige o	100	
	For dry process cast iron	1	ſ	6.7	687		*
	For wet process cast iron	17.4	1,780	4.8	432	9	9
	For sheet metal and other metals]		12.4	1,271	8	8
	Ceramic glazes for pottery, and						

TABLE 5 (continued)

ndustry sub-	Shell Niene employed he to m	19	58		1963		(9.00009
ivision (b)	manage suist. valueses outsy	Quantity	Value	Quantity	Value	Enter- prises	Entries
rodec.K	MISCELLANEOUS CHEMICAL PRODUCTS (continued)		£'000	Mariet Sais	£'000	Number	Number
08	Chemicals for laboratory use, other than radioactive or isotopically labelled (i.e. chemicals for		324	naule and	Allo I Mari	Salasiani Salasia	64 (82) 1823
23	analysis, research or educational purposes but not chemicals used for manufacture)		2,128		2,416	8	8
07	Coal carbonisation products not elsewhere specified (other than sheep and cattle dips,		de destant		LIBER CIVEL AS	E HERAN	
	disinfectants, etc.)	Th.tons		Th.tons	ALIXA COLO		
	Refined coal tar	533	5,730	630	6,678	22	26
11	Creosote oils (including anthracene oil)	393	5,176	453	5,248	30	35
	Creosote/pitch mixtures	1,020	9,582	769	6,308	18	21
	Pitch	447	5,136	474	4,966	21	24
	Crude tar acids, including cresylic acid	69.7	4,940	97.7	6,763	20	23
08	Other unrefined coal tar derivatives Finings, etc. (excluding isinglass)		7,960	etantore (2,543	18	21
00	for the brewing and similar trades		235		446	*	*
08	Fire-extinguishing compositions		176		156		
08	Fluxes for metals, etc.		1,189	Section 1	1,309	9	9
08	Food and perfume materials (excluding synthetic perfumery chemicals)	spipi lo s respensi		od 30 md	1,000		
	Flavouring essences and compounds for foods, etc.	included of	5,527	a behelsel	6,145	43	48
37.0	ereamitteen antan ni growing asis sar.	Th.lb.	3,321	Th.lb.	0,145	45	40
	Essential oils (natural, other than turpentine)	1,185	1,538	977	1,022 1,068	9	11
	Confectioners' colours and other dyes for foods, etc.	•••	317	. 000	487	16	17
08	Perfumery chemicals, synthetic	21.1281.132	474		2,851	11	12
08	Photographic developers and other compounded preparations for photographic purposes	il not as no	1,437		3,667	14	14
08	Plasticisers, not elsewhere specified	Th.tons	1,401	Th.tons	3,001	14	
	Phthalates	22.7	4,339	66.6	10,260	14	16
9203	Phosphates	14.5	3,263	20.1	3,712	6	- 7
	Other plasticisers	5.6	1,591	12.6	3,009	19	19
08	Rosin size	26.9	1,519	24.0	1,582	5	5
08	Rubber-processing chemicals	20.0	2,010	24.0	1,002		
	Rubber accelerators	7.9	3,164	11.9	4,886	5	5
	Rubber anti-oxidants	4.8	2,745	9.2	4,859		
	Other rubber-processing chemicals	a alkaland	1,316	8.2	1,753	9	11
08	Tanning agents (synthetic organic) and chemicals for use in tanning, not elsewhere specified	4.8	390	35.3	2,287	12	13
08	Textile auxiliaries (e.g. sizes, combing oils, but excluding surfaceactive materials)		2,949(g)		4,610	25	29
08	Water treatment compounds (including		_,5.20%)		2,010	23	20
	boiler compositions, etc.)		1,829		1,758	16	16

TABLE 5 (continued)

Industry		19	58		1963			
sub- division (b)	Series auges craines again	Quantity	Value	Quantity	Value	Enter- prises	Entries	
Indept	MISCELLANEOUS CHEMICAL PRODUCTS (continued)		£'000	MARCH MORE	€,000	Number	Number	
08	Other chemicals, not elsewhere specified		tener d dis		10,866	54	56	
	Miscellaneous chemical products, unclassified	}	92,745(g)		5,091	39	42	
10/78	OTHER PRODUCTS WASTE PRODUCTS]		rachere as	50,140	46	64	
	Tail gas, and products of cracking plants re-sold to refineries, etc.]	1,168		6,620	(2.75)		
100	Other waste products WORK DONE ON COMMISSION, SUB-CONTRACT	}	l	••	1,690	43	63	
36	WORK, ETC.	\$ 200	1,445		1,727	28	32	
	Total	\$ 0000.00 1000.00	585,240(g)	PRINCES.	781,541	137		
CX 1	Sales in other industries (see Table 6)		90,681		127,980	33		
	Principal products of this industry sold by establish-ments in the industry		494,559	is a guidadas	653,471	224	318(s)	

- (a) Sales of products derived from petroleum that are identical with those derived from coal tar are
- (b) The number given is that of the sub-division of which the item is a characteristic product. The sales shown are the total sales by larger firms, not merely sales by establishments classified to
- (c) The 1958 figures are included with 'Inorganic chemicals, not elsewhere specified'.
- (d) Including sales returned by undertakings classified to the Gas industry in which particulars were required from all undertakings.
- (e) Including calcium phosphates for 1958.
- (f) Included with calcium salts and compounds for 1958.
- (h) Excluding some sales of hydrocarbons by oil refineries.
- (i) The 1958 figures are included with 'Organic chemicals not elsewhere specified other'.
- (j) Not specified as excluding anti-freeze mixtures for 1958.
- (k) Not recorded separately for 1958.
- (1) The 1958 figures are included with 'Organic chemicals not elsewhere specified metallic'.
- (m) The 1958 figures include 'Aluminium compounds organic' and 'Sodium compounds organic'.
- (n) Including sales of cellulose acetate by firms classified to the Man-made Fibre industry for 1958: such sales amounted to £2,429,000. For 1963 sales are included in the heading 'cellulose acetate
- (o) Including some blended natural and synthetic iron oxides.
- (p) So far as recorded separately.
- (q) Sales of sex hormones and preparations (natural and synthetic) having analogous physiological activity only. Corticotrophin, cortisone and hydrocortisone salts and derivatives and other similar steroid preparations were included in the report on the Pharmaceutical Preparations industry for 1958, such sales being valued at £3,484,000.
- (r) The 1958 figures are included with 'Other chemicals not elsewhere specified'.
- (s) This figure represents the total number of returns made by larger firms in this industry, which is less than the total number of establishments in Table 2 on account of combined returns covering more than one establishment.

TABLE 6 Sales of principal products of the industry by establishments classified to other industries, 1958 and 1963

	19	958(a)	derman 1		1963	
sedmid 500.75	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (b)
Inorganic chemicals		€,000	Th.tons	£,000	Number	1122021-11
Sulphuric and other inorganic acids	Th.tons	1,316	131	1,686	12	22,26,30,127
Bleaching materials {	14.6	218	3.8	323	5.	25,33,35
Copper sulphate: aluminium, ammonium, barium, cadmium, calcium, cobalt, lead, magnesium, mercury, phosphorus, potassium, rare earth, silver, sodium and	7.01 J	28	ji 3280	70429 504 9 000 1 752	9790 3	
zinc salts and compounds	talal.et	6,245	condition	14,573	52	(c)
Ammonia (liquor and anhydrous)	52.1537		60.3	1,327	17	22, 26, 127
Sulphur Other and unclassified inorganic		4,091	57.8	334	5	23,40
chemicals	J	l		6,071	12	(c)
Total inorganic chemicals including white lead, dry	The second second	11,897		24,315		
rganic chemicals Cyclic hydrocarbons, pure or refined		e Crostople well beside successorie			1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Benzoles			117	5,413	21	22,23,24
Toluoles		212,0	26.1	1,477	17	22,23,28
Xyloles			13.4	829	16	22,23
Naphthalene		12,271	30.2	846	21	22,23,33
Naphthas (solvent and heavy)			4.3	182	11	22
Other primary cyclic hydro- carbons				823	9	22,23,28
Cellulose esters and ethers Esters, not elsewhere specified other than butyl and ethyl			10.2	3,320	8	30,31,34,75
acetate	}	13,273	2.1	360	5	28,30,31,119
Surface-active material			35.5	4,377	26	24, 25, 31, 33
Other organic chemicals	J	221.51	••	15,295	29	(c)
Total organic chemicals	acce. 117	25,544		32,922	1	
igments		100			(ieogi)	
Inorganic pigment colours, pure or reduced, dry and in pulp form	t.05.	1,031	8.8%	1,314	9) 879/E	25,31,73
Synthetic organic pigments pure or reduced and other pigments		3, 128		3,778	13	25,31,40
Total pigments, exclud- ing white lead, dry	e e	4,160		5,092		

	19	58(a)			1963	
(200)	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (b)
To the processes such	2120A26	£'000	(1 × 1 20 × 0)3	£,000	Number	
Pharmaceutical chemicals (chemicals for therapeutic or prophylactic (including veterinary) use, unmixed and uncompounded, including organotherapeutic extracts of glands, etc., steroids, etc., and vaccines, etc., in all forms but excluding other products put up in measured doses)	779	1300°2 030,1	Th.kg.			
Alkaloids, their salts and other derivatives		897 {	10.8	730 104] 11	25,28
Antibiotics		1,045	79.7	1,907 1,122] 11	25,28
100 28 0 872 07 100 28 0 21 28 0 872 07	Mn.inter- national units		Mn.inter- national units			
Insulin (all forms and solutions including sales in measured doses)	4,253	1,545	3,858	1,344	5	28
Anaesthetics, general and local, not elsewhere specified				2,421	11	25,26,28
Other organo-therapeutic extracts of glands or other organs or of their secretions (all forms in- cluding sales in measured doses)		569, XL		561	11	28
Steroid preparations (cortisone, hydrocortisone, etc.), hormones and similar products having analogous physiological properties not elsewhere specified (all forms including sales in compounded forms or measured doses)	}	9,645<		5,312	22	bacitan
Sulphonamides (other than tablets)			41	1,068	7	25,28
Vaccines, sera and other serological products (all forms including sales in measured doses)			 Th.kg.	2,947	8	28
Organo-inorganic compounds for medicinal use, not elsewhere specified			36.6	221	5	28
Other pharmaceutical chemicals		519-241		7,733	30	25,26,28,29
Total pharmaceutical chemicals	LOBE TO SE	13,132	and the co	25,469	skebras	tellikese scr stirse+speltek skangie sesio
Miscellaneous chemical products			Th.tons		4.250 690	
Anti-freeze mixtures (excluding pure ethylene glycol)		(d) {	3.7	623 838	} 22	24,26,28,31
Bituminous products (other than for use as paints)	Th.tons 24.8	744	20.3	710	10	31,107
Coal carbonisations products		10,000		6,207	9	22,31,127
Food and perfume materials (excluding synthetic perfumery chemicals)		1,272		833	27	(c)

TABLE 6 (continued)

	19	58(a)	1963				
	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (b)	
00012 1 1000000 100 011	And Chann	£'000		₹,000	Number	A Section	
Miscellaneous chemical products (continued)	30054		adio box 1 box (1994)		E POS BAR CO CLAS		
Chemicals for laboratory use,	h	1 000 st	Direth a		athains.		
other than radioactive or isotopically labelled				201		25,28	
Fluxes for metals, etc.	14 .			1,259	6	40,42,50,73	
Photographic developers and							
other compounded preparations for photographic purposes		2892 303	and a massival	2,580	7	28,53	
		23,932	Th. tons				
Plasticisers	697		7.8	1,258	6	25,31,34,10	
Tanning agents (synthetic	100.00						
organic) and chemicals for use in tanning			2.4	267		25	
Textile auxiliaries			8 80130	2,041	8	25,33	
Other products, including some compressed gases				23,363	61	(c)	
Total	E.	90,681	1000	127,980		990 676 dani. 490 awa	

⁽a) Owing to the amalgamation of the Coal Tar Products industry with Chemicals (General) industry the 1958 figures have been revised where necessary.

⁽b) The references given are to the list of industries at the back of this report.

⁽c) Production is widely distributed.

⁽d) Not recorded separately.

Sales of other than principal products by larger firms in the industry, 1958 and 1963

	19	958	19	63
	Quantity	Value	Quantity	Value
SECTION DUD'S DOME BY		£'000	45	£,000
Limestone or dolomite, salt, gypsum and other miscellaneous non-metalliferous mining and quarrying products		1,316	ous chesic	1,066
Crude benzole (including light oils distilling not less than 90 per cent. at 200°C)	1.	95	ods / sol s psolini ss	60
Miscellaneous food products		4,314	1	6,426
Soft drinks and fruit juices		1,340	alasum to	1,042
Synthetic organic dyestuffs and preparations for dyeing		1,369(a)	Spons.	1,572
Fertilizers and chemicals for pest control		3,799	. Diductro	6,891
Pharmaceutical preparations	4.	7,069	. 20.21	8,534
Toilet preparations		1,891		2,733
Products of the paint and printing ink industry		986	wade. bus	1,268
Soap, detergents, candles and glycerine		4,633	500	5,947
Polishes, gelatine, adhesives etc.		306	el mi Ligana	636
Non-ferrous metals and alloys	11. 08	2,813	12 (8 1 0 sibro	3,003
Refined hydrocarbons, petroleum spirit lubricating oils and greases		1		6,326
Synthetic resins and plastics materials	}	17,305	•••	16,345
Other products including electricity sold	Joseph a	- Prophyla	ericon a	34,559
Services rendered to other organisations (b)	pad alfadea	1831]. 880	and Arts	9,501
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	heard se	40,598	al (201726	92,413
Canteen takings		1,515		1,947
Total		89,349(c)	1 12 9	200,269

⁽a) Revised figure.

Production of certain products of the industry by larger firms, including production by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

	19	58			19	63	3					
	Quantity returned	Quantity returned	Returne	ed in this	s industry	Returned	in all	industries				
	in this industry		Quantity	Enter- prises	Entries	Quantity	Enter- prises	Entries				
trobe eval as 185	Th.tons	Th.tons	Th. tons	Number	Number	Th.tons	Number	Number				
Inorganic chemicals	And personale	has rethink										
Ammonia	e estatu elle	PATE THE ES	posi ist		ery lane of	to intract		263				
Liquor (in terms of 100 per cent. ammonia)) (a)	(a) {	orleasy o	•	•	163	13	25				
Anhydrous	J man rai	es as Sel	•	•		220	•	11				
Chlorine	368	368	660	6	6	660	6	6				
Sodium salts and compounds					1.12.780.380			4 23 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3				
Hydroxide (caustic soda)	(a)	(a)	897	7	8	897	7	8				
Pharmaceutical chemicals		Th.kg.	Th.kg.			Th.kg.						
Acetylsalicylic acid (aspirin) (other than aspirin tablets) and salicylates		3,720(ь)	4,131	gergurorig	(laveas;)	4,148	9	9				
Alkaloids, their salts and other derivatives	15				I obsu-ma	18,960 100		124				
Morphine, codeine, ethyl morphine and other derivatives of morphine	Lance •	30.7	trices, o	o Francis	. 3	39.5	is to	281				
Other alkaloids	esteller b	185	67.3		5	70.8	9	10				
Antibiotics						1.202						
Penicillin, its salts and derivatives	or beautiful	129	•ssig	noreana restat yn	ar wes gua	205	7	7				
Other antibiotics	3	1			10 .	190	10	10				
Barbituric acid, its salts and derivatives	(a)	(a) {			A 150	205	5	5				
Sulphonamides (other than in tablet form)	January Base	polity single	*	and property of the second	1 10 to 10	1,013	7	7				

⁽a) Not recorded separately.

⁽b) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered to other organisations.

⁽c) Excluding amounts charged for services rendered to other organisations.

⁽b) For 1958 the figures did not include salicylates.

TABLE 9 Purchases of selected principal products of the industry by larger firms, 1963 (a)

Standard Industrial Classification Minimum List	Purchasing industry (b)	Heavy chemicals (acids alkalis, alcohols, other inorganic and organic chemicals, compressed gases, etc.
Heading	The root of The roots Number Number No. 100 No. 100	Cost
	and those or the terrest throughout them.	£,000
263	Lubricating oils and greases	4,765
271/1	Dyestuffs	16,947
271/2	Fertilizers and chemicals for pest control	21,440
271/3	General chemicals	130,738
272/1	Pharmaceutical preparations	15,404
274	Paint and printing ink	17,206
275/2	Soap, detergents, candles and glycerine	20,111
276	Synthetic resins and plastics materials	52,675
311	Iron and steel (general)	7,296
351	Scientific, surgical and photographic instruments, etc.	4,063
411	Production of man-made fibres	25,192
423	Textile finishing	4,423
463	Glass	7,642
481	Paper and board	4,523
491	Rubber	7,045
496	Plastics moulding and fabrication	4,953
499	Miscellaneous manufacturing industries	6,142
many refers	Other industries	35,175
The state of	Total	385,740

⁽a) The figures include purchases of imported as well as of home produced goods.

TABLE 10 Purchases by larger firms in the industry, 1954 and 1963 Firms employing 25 or more persons: United Kingdom

Quantity Cost Quantity Cost	198	54	19	63
000 2 1000 2	Quantity	Cost	Quantity	Cost
Materials for processing	Th.tons	£'000	Th.tons	£,000
Feedstock from petroleum, including gaseous feedstock		7,019	2,155	18,912
Crude coal tar for distillation	1,931	11,458	2,032	13,893
Crude or semi-refined benzole for refining		2,570	731	7,133
Crude tar acids and other derivatives of coal tar, not elsewhere specified (including creosote and anthracene oils, cresylic acid, etc., but excluding primary cyclic hydrocarbons and phenol)	die ,amodis baimi ,tem mios ,asign	4,652	shatic live epotens, pro lic hydroca	4,458
Coal and coke other than for use as fuel	844	4,255	553	4,191
Barium sulphate (barytes) and natural barium carbonate		534		418
Bauxite	obi di	(a)	bita Atom Si	1,369
Essential oils (other than turpentine)		1,678		3,518
Limestone and lime		1,944		3,198
cases, dic.	46.0	4,383 {	52.0	3,357
Lead, metallic	40.0	l		476
Mercury		1,260	touchte ly	769
Molasses		2,915	bin e eggs	1,571
Phosphate rock (mineral phosphate of lime)	••	1,592	307 1 94.0	(a)
Sulphur (elemental)		4,194	Identiz te	4,009
Sulphur-bearing materials (including anhydrites, pyrites, spent oxide, but excluding elemental sulphur)		3,101	lestrois is	2,071
Salt and brine	••	1,586	their because	1,195
Silicon and silicon bearing minerals	••	(b)	6110m12	366
	Th.cwt.	414	Th.cwt.	646
Tin call has been properly as the second sec	Th.tons	314	Th.tons	2301
Zinc and zinc dust	34.0	2,878	51.0	3,266
Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, etc.)	200 (1000) 100 (1000) 1400(8)	tea rom est sknaug bet met je ten	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	19040 18 000 1980
Inorganic	anto (boarto	ni ellurab	å pingarn	and make the
Acids	316	3,110	461	3,453
Sulphuric (in terms of 100 per cent. acid)	19.7	576	24.8	683
Nitric (in terms of 100 per cent. acid)	1	1	2.1	211
Phosphoric (in terms of 100 per cent. acid) Aluminium oxide anhydrous (alumina) and hydrated (aluminium hydroxide)		(b)	13.3	470
Ammonia	a Life pero sp	line estim	10000 000	Saloulay.
Liquor (in terms of 100 per cent. ammonia)	54.3	1,442	48.7	1,449
Anhydrous	14.8	565	7.5	323
Calcium carbide	131	4,403	#1527.1k	(a)
Calcium chloride	murah bini	(b)	12.9	174
Chlorine	91.7	2,294	157	3,502
Sodium carbonate including soda crystals and soda ash	211	2,214	224	2,877
Sodium hydroxide (caustic soda)	118	1,940	260	4,191
Other inorganic chemicals not elsewhere specified	belau	2,568	1) 35Q++ S	19,491

⁽b) Specified Census industries for which purchases are one per cent. or more of the total.

subjects because	1954		1963	
	Quantity	Cost	Quantity	Cost
Materials for processing (continued)		£,000		£,000
Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, etc.) (continued)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		i aleinan
Organic			STATE OF STATE	SCHOOL SCHOOL
Primary hydrocarbons, synthetic or natural, other than for use as fuel	plains so	t eliconed b	6799 - Losa	to sheet
Aliphatic hydrocarbons, (ethane, ethylene, propylene, propylene tetramer, butadiene, etc.) Cyclic hydrocarbons, (benzoles, toluoles, xyloles,	lo envice constantant parterna	(b)	ine settin in il toqu set se ettin	12,840
naphthas, naphthalene, etc., excluding crude benzole and other unrefined products of coal tar)	Ampton a	2,839	redictions	9,838
	1986 Jasus	time (mery	Th.tons	ta maliana
Acetic acid and acetic anhydride		920	17.3	1,419
	Th. tons		17,250	
Acetone	11.8	968	38.1	1,876
Alcohols			TOTAL DATE OF	ection;
Methyl alcohol		2,470	95.0	2,509
Ethyl alcohol	enemiz, ex		4,3333	Waterwald
Duty-paid		796	0.3	985
Duty-free	enil to ess	3,132 {	87.0	4,592 572
Butyl alcohol	6.6	963	12.0	1,160
Other alcohols	30.1	1,128	75.3	6,333
Chlorinated hydrocarbons	1	ſ	43.9	2,647
Maleic anhydride		(b) {	0.8	93
Phenol	5.8	899	14.3	1,634
Phthalic anhydride	9.7	1.254	26.0	2,214
Other organic chemicals not elsewhere specified		1.694	20.0	35,060
Other heavy chemicals not elsewhere specified (including compressed gases, etc., but excluding gases for use as fuel or feedstock)	PROCESSOR (S	TENTE TENT	Sele onla STEELER	one oned
		66	BETO CAR S	7,699
Synthetic organic dyestuffs intermediates (including aniline and aniline oil)		1,674		2,678
	10.30 10.9 10.	(Th.gal.	600
Lubricating oils and greases	Church Bed	(1)	5,151	688
Eduticating offs and greases	DOC TOO COL	(b) {	Th.cwt.	34
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as	A STEEL ASSESSED.	(etileo	3.3	14
replacement	- 2000 - Year	8,822	7 43 1 10000	14,096
All other materials for processing		74,914	astribyes	62,199
Packaging materials	plant street early		Bldygn es i	
Paper and board				
Boxes, cartons, packing cases, and drums and canisters (with or without metal ends) of paper, cardboard and fibreboard			izolda mair	2,064
18.8 1822 828.5 LES Services took state		and the same of th	Millions	2,004
Multiwall paper sacks	•••	1,500	45.2	2,369
Wrapping paper (including paper coated with plastics and any laminates incorporating paper but not metal), moulded pulp units, labels and other packaging	Masia ros	E LEWINGS	ANGTON TO	EFO
materials of paper, cardboard and fibreboard	J	(306

TABLE 10 (continued)

	personal United Eingdom	198	54	1963	
	and the same of th	Quantity	Cost	Quantity	Cost
ackaging materials (contin	nued)		£,000		£,000
Metal	No. 1 4,835	Table Balance	ma viniam	de suployed	
Cans and boxes	Management and American	7	1	••	1,237
				Thousands	
Barrels, kegs and drum	015.4 000.3			5,258	6,303
Aluminium collapsible	tubes, aluminium foil, and any	2.1	90000	Total San	
laminates incorporating foil labels and closure	g aluminium foil and aluminium		3,451		80
Other packaging materia	als of metal including crown				
corks, wire, foil and	any laminates incorporating nium foil), foil labels and foil	C o selais	er along by	02. 38.28369	
closures, tensional st	eel strappings, etc.				914
Timber	July	1.2			
Containers wholly or m	ainly of wood, including plywood	1		aspent t	a Laider
boxes and drums, baske	ts and wickerwork crates		and the same		440
				Th.cu.ft.	
Timber (sawn or planed) for manufacture into packing	100 m	604 {	[11.1	7
cases, etc.				Th.sq.ft.	2
		0.0	in the last	58.4	1
Plywood for manufactur	e into packing cases	J		1	1
Other wood products for	packaging, including wood wool		(b)		23
				Th.gross	
			[272	498
Glass containers (includ	ing glass syphons)	ns west !!	1,331 {	14 19 7 19	584
Plastics		1000			
Moulded and fabricated	packs and containers (e.g.	lı l	1		
bottles and bottle cap polyethylene	s) wholly or mainly of				788
	c., wholly or mainly of	}	(c)		
polyethylene (includin	g bags and lay flat tubing)	100 113 103 200	100	44.	153
Jute and hessian piece g	oods, sacks and bags				750
		and to dr	4,640		1,403
All other packaging mate	rials	Th. tons	4,040	Th. tons	1,405
uel and electricity (d)		3,622	11,652	3,965	18,707
Coal					
Coke (including screening	ngs) and manufactured fuel	299	1,428	202	1,519
		Th.gal.		Th.gal.	
Derv fuel and motor spin	it for use in road vehicles	5,711	1,069	7,832	1,396
Other liquid fuels (incl	uding creosote/pitch mixtures, {	59,917	2,276	222 700	0 201
etc., and liquefied petr	oleum gases)	giops inside	256	332,720	8,391
		Th.therms		Th. therms	
	Tag	18,267	634	24,771	1,077
Gas			269] 24,111	1,011
		Th.kWh	20167	Th.kWh	225 25.75
Electricity		3,548,477	11,538	7,093,372	25,772
Total cost of materials and fuel			218,731		358,679
Goods purchased for merch	anting	\$21.780 B	sa Marayais	* 2000000330	80,271
	ger tr				1,646
Canteen purchases				25101	1,040
Total cost of	nurchases	Burnell Con			440,596

⁽a) Owing to the risk of disclosure of information relating to individual firms, separate particulars cannot be given and it has been included with 'All other materials for processing'.

⁽b) Not recorded separately.

⁽c) Included in 'All other packaging materials'.

⁽d) The total quantity of electricity generated in firms' own establishments in this industry was 1,629,550 Th.kWh in 1954 and 7,399,636 Th.kWh in 1963.

Transport costs and employment of larger TABLE 11 firms, 1963

MATERIAL PROPERTY OF THE PROPE	Unit	1963
Average number employed mainly on transport	No.	4,555
Transport costs		
Wages and salaries	€,000	4,310
Derv fuel and motor spirit	100 -107	1,396
Payments to other organisations for transport		19,517
Costs of operating road goods vehicles		ri motorio
Insurance		# 208
Yehicle licences		331
Depreciation	69 60 50 S	1,328
Payments to other organisations for repairs and maintenance	idea erai e	509
Total	• devan	27,598

TABLE 12 Payments for certain services, etc. by larger firms, 1963 (a)

Firms employing 25 or more persons: United Kingdom

The state of the s	Amounts payable
Repairs and maintenance to	€,000
Buildings	1,205
Road goods vehicles	509
Plant, machinery, and other capital equipment	5,615
Insurance, licensing and depreciation of road goods vehicles (b)	1,867
Rates, excluding water rates	5,226
Hire of plant and machinery	781
Postage, telephone, telegrams and cables	2,049
Total	17,253

⁽a) No deduction is made for these payments to arrive at the figures of net output given in this report.

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger firms, 1963 Firms employing 25 or more persons: United Kingdom

Year ended	Percentage of total number employed	Year ended	Percentage of total number employed
1963	Per cent.	1963 (contd.)	Per cent.
April (a)	2.1	November	1.4
May	0.1	December	58.5
June	6.0	1964	
July	1.2	1304	
August	0.4	January	0.1
September	2.5	February	0.7
October	0.7	March	26.3
	early oney, see	Total	100

⁽a) Including returns made for twelve-month periods ended 1st to 5th April, 1964.

TABLE 14 Sales of all parts of machinery and plant by larger firms, including sales by estab-lishments classified to other industries, 1958 and 1963

This table is not applicable to this industry.

⁽b) For details see Table 11.

Capital Expenditure (continued)

(ii) Land and existing buildings.

The items shown are the capital cost of freeholds purchased and the capital cost or premium payable for leaseholds acquired (excluding the value of any assets acquired in taking over an existing business), and the amounts receivable for any freeholds or leaseholds disposed of. The value is that charged to capital account during the year of return.

(iii) Plant, machinery and vehicles.

The items shown are the value of plant and machinery and of vehicles acquired, both new and second-hand, and the amount received for items disposed of during the year. The value of plant and machinery acquired includes plant, etc. which firms produced for their own use in connection with the business covered by the return. The value of plant, etc. acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. No deduction is made for depreciation, amortisation or obsolescence. The proceeds of items disposed of during the year exclude amounts written off for items scrapped.

Capital expenditure during the year in respect of manufacturing establishments where production had not started before the end of the year is excluded in this report for both 1958 and 1963.

Characteristic Products

The characteristic products of a sub-division are those in terms of which the sub-division is defined. They are products commonly associated in production and are usually similar in nature or manner of production. In most cases the characteristic products of each sub-division are indicated in Table 5 of the industry reports. For those industries for which an analysis by sub-divisions has been made, Table 2 shows the total sales of such characteristic products for each sub-division. The totals include, besides the products which call the sub-division, other items of output assumed to be closely related to them, e.g. waste products and work done.

Enterprise

The term enterprise is used in this report to mean one or more firms under common ownership or control. An enterprise normally consists either of a single firm, or of a parent company together with its subsidiary companies.

Entries

The number of entries shown in Tables 5, 6 and 8 against a particular output or production heading is the number of returns on which figures were recorded for that item.

Establishment

The census was based on the establishment, comprising in most cases the whole of the premises under the same ownership or management at a particular address (e.g. a factory or mine); but firms were asked to exclude from all sections of their returns particulars relating to any department not engaged in production for which they kept a separate set of accounts. Where separate accounts were not kept, they were asked to include merchanting or factoring, canteens operated by them and other

ancillary activities such as bottling, packing and the manufacture of containers for packing their own products, whether or not these activities are carried on at the same address as the works. Building and engineering maintenance departments and selling and transport departments were treated similarly.

Gross Output

The gross output of an industry is the aggregate value of goods made and other work done during the year by the establishments classified to the industry. It is derived by subtracting from the value of sales and work done, the value of stocks of goods on hand for sale and work in progress at the beginning of the year and adding the value at the end of the year.

Larger Firms

These are firms in which twenty-five or more persons were employed on the average during the year.

Net Output

The net output of an industry represents the value added to materials by the process of production. It includes the gross margin on any merchanted or factored goods sold; it constitutes the fund from which wages, salaries, insurance, pensions, hire of plant and machinery, payments for repairs and maintenance, costs of operating road vehicles, rents, rates and taxes, advertising and other selling expenses and all other similar charges have to be met, as well as depreciation and profits. There is no appreciable duplication in net output. Net output has been obtained by deducting from the gross output the cost of purchases adjusted for stock changes, payments for work given out to other firms, and payments for transport.

Normally any customs or excise duty on materials purchased is included in the cost of materials. Similarly, finished goods sold have been valued as they were sold, duty paid or duty free. The amounts of duty, subsidies, allowances and levies receivable or payable, where of substantial importance in the industry, were required to be stated separately, and these items were taken into account when calculating net output.

Net output per person employed

The figures for net output per person employed are derived by dividing the net output by the average number of persons employed (full-time and part-time) on all activities covered by the returns, including operatives, administrative, technical and clerical employees and working proprietors, but excluding outworkers.

Principal Products

The principal products of an industry are those in terms of which the industry is defined. They are products commonly associated in production, and are usually similar in nature or manner of production.

Production

This means the total quantity of a product made during the year, whether sold in the year, added to stock, transferred to another department of the same firm, or used in the manufacture of other products within the business covered by the return. It includes goods produced from materials supplied by other firms.

Purchases

Purchases include the cost of materials and components bought for use in production; of fuel and electricity for all purposes; of packaging materials, including the full cost of returnable cases and containers when first purchased; of workshop materials, office materials and materials for repairs to firms' own buildings, plant and vehicles when carried out by their own workpeople included in the return; of consumable tools; and of parts for machinery purchased during the year as replacements. Water charges are also included. In general purchases of goods for merchanting or factoring and canteen supplies are included. Materials supplied by customers for processing are excluded.

The values shown include any duty paid (less rebate, etc.) but exclude trade discounts allowed. The cost of transport is included only if included in the cost of materials as invoiced; amounts paid to transport organisations, including firms' own separate transport organisations, for delivery of materials and fuel are, therefore, excluded. Materials purchased overseas are included at their c.i.f. cost plus any duty payable if the cost of transport from the docks was not included in the invoiced price, but at their full delivered cost if invoiced 'carriage paid home'. Materials and fuel transferred from another department of the firm not covered by the same return are included at the estimated selling value recorded by the other department.

Sales

Sales are in respect of goods made by the business covered by the return, goods made for it by outworkers or by other firms from materials given out to them (sometimes described as goods made on commission) and waste products. Any machinery or other capital items produced for use in the business covered by the return are included, the value being that adopted in the firm's capital asset account. Goods sold without being subjected to any manufacturing process (merchanted or factored) and canteen takings are included as in 1958.

The value shown for sales is the net selling value, defined as the amount charged to customers whether on an ex-works or delivered basis, net of any trade discounts, agents' commissions, allowances for returnable cases. purchase tax, etc.; the net amount charged for packing materials is included. Goods charged on a delivered basis to customers overseas are included at the f.o.b. value. For work done on commission or for the trade the value shown is the net amount charged.

Where goods produced in one department were transferred to another department of the same firm not covered by the return, these transfers were treated as sales by the producing department and valued as far as possible as if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations for which separate accounts were kept were valued on the same basis. Estimations of a similar kind were also sometimes necessary in valuing transfers between different firms belonging to the same enterprise. To the extent that the sales of finished products of one establishment may constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication.

Services rendered

This represents the amounts charged for hiring out plant, machinery and other goods, providing transport, or for any technical or other

services rendered to other organisations. It includes amounts credited for similar services rendered to other departments of the same firm not covered by the return.

These are firms in which fewer than twenty-five persons were employed on the average during the

Stocks and Work in Progress

Values are given of stocks of goods on hand for sale, and of materials and fuel, at the beginning and end of the year of return, including any stocks of goods held for merchanting or factoring. The values include duty in the case of dutiable goods held out of bond. The value of work in progress at the two dates is also usually shown. This excludes any progress payments made to sub-contractors, and no deduction is made on account of progress payments received.

Transport Payments

These represent the total amount paid or credited during the year for both outwards transport of finished goods sold and inwards transport of materials and fuel purchased. They include payments to other firms, and to any separate transport organisation of the same firm, not covered by the return, but exclude the value of transport services provided by the business covered by the return. The items included are payments for hired cartage and for inwards and outwards carriage by all forms of inland transport, i.e. railways, road haulage, canals, coast-wise shipping, air, etc.
Payments made for sea freight on goods sold to customers overseas and on materials and fuel purchased from overseas suppliers are excluded.

Wages and Salaries

These are the amounts paid during the year to operatives and to administrative, technical and clerical employees. Payments to working proprietors, whether called salaries or not, are excluded; in Northern Ireland this exclusion extends also to payments to directors of limited companies. The values shown include all overtime payments, bonuses and commissions, whether paid regularly or not, and no deduction is made for income tax, insurances, contributory pensions, etc. The value of any payments in kind, travelling expenses, lodging allowances, etc. and employers' contributions to National Insurance and pension schemes is excluded.

Work given out

The figures shown represent the total amount paid for work done by other firms on materials supplied to them, and also by firms' own establishments for which separate returns were made. They do not include payments to individual outworkers or payments for business and other services.

Symbols used

The following symbols are used throughout the

- .. Not available
- Nil or negligible (less than half the final digit shown)
- * Figures cannot be shown owing to the risk of disclosing information about individual enterprises.

Rounding of Figures

The figures in the tables have, where necessary, been rounded to the nearest final digit. There may, therefore, be apparent slight discrepancies between the sums of the constituent items and the totals shown.

List of Industry Reports, etc

Part No. and title

- 1 Introductory Notes 2 Coal Mining

- 3 Stone and Slate Quarrying and Mining 4 Chalk, Clay, Sand and Gravel Extraction
- 5 Metalliferous Mining and Quarrying 6 Salt and Miscellaneous Non-metalliferous
- Mining and Quarrying
- 7 Grain Milling 8 Bread and Flour Confectionery
- 10 Bacon Curing, Meat and Fish Products
- 12 Sugar
- 13 Cocoa, Chocolate and Sugar Confectionery
- 14 Fruit and Vegetable Products
- 15 Animal and Poultry Foods
- 16 Margarine
- 17 Starch and Miscellaneous Foods
- 18 Brewing and Malting
 19 Spirit Distilling and Compounding
 20 Soft Drinks, British Wines, Cider and Perry
- 21 Tobacco
- 22 Coke Ovens and Manufactured Fuel
- 23 Mineral Oil Refining
- 24 Lubricating Oils and Greases
- 25 Dyestuffs
- 26 Fertilizers and Chemicals for Pest Control 27 General Chemicals
- 28 Pharmaceutical Preparations
- 29 Toilet Preparations 30 Explosives and Fireworks
- 31 Paint and Printing Ink
- 32 Vegetable and Animal Oils and Fats
- 33 Soap, Detergents, Candles and Glycerine
- 34 Synthetic Resins and Plastics Materials
- 35 Polishes
- 36 Gelatine, Adhesives, etc.
- 37 Iron and Steel (General)
- 38 Steel Tubes
- 39 Iron Castings, etc.
- 40 Non-ferrous Metals
- 41 Agricultural Machinery (except Tractors)
- 42 Metal-working Machine Tools 43 Engineers' Small Tools and Gauges
- 44 Industrial Engines
- 45 Textile Machinery and Accessories
- 46 Contractors' Plant and Quarrying Machinery
- 47 Mechanical Handling Equipment
- 48 Office Machinery
 49 Miscellaneous (Non-electrical) Machinery
 50 Industrial Plant and Steelwork
 51 Ordnance and Small Arms

- 52 General Mechanical Engineering
- 53 Scientific, Surgical and Photographic Instruments, etc.
- 54 Watches and Clocks
- 55 Electrical Machinery
- 56 Insulated Wires and Cables
- 57 Telegraph and Telephone Apparatus 58 Radio and Other Electronic Apparatus
- 59 Domestic Electrical Appliances
- 60 Miscellaneous Electrical Goods
- 61 Shipbuilding and Marine Engineering 62 Motor Vehicle Manufacturing
- 63 Motor Cycle, Three-wheel Vehicle and Pedal
- Cycle Manufacturing
- 64 Aircraft Manufacturing and Repairing
- 65 Locomotives and Railway Track Equipment 66 Railway Carriages and Wagons and Trams
- 67 Perambulators, Hand-trucks, etc. 68 Tools and Implements

Part No. and title

- 69 Cutlery
- 70 Bolts, Nuts, Screws, Rivets, etc.
- 71 Wire and Wire Manufactures
- 72 Cans and Metal Boxes
- 73 Jewellery, Plate and Refining of Precious
- 74 Miscellaneous Metal Manufactures
- 75 Production of Man-made Fibres
- 76 Spinning and Doubling of Cotton, Flax and Man-made Fibres
- 77 Weaving of Cotton, Linen and Man-made Fibres
- 78 Woollen and Worsted 79 Jute
- 80 Rope, Twine and Net
- 81 Hosiery and Other Knitted Goods
- 82 Lace
- 83 Carnets
- 84 Narrow Fabrics 85 Household Textiles and Handkerchiefs
- 86 Canvas Goods and Sacks
- 87 Textile Finishing
- 88 Asbestos
- 89 Miscellaneous Textile Industries
- 90 Leather (Tanning and Dressing) and Fellmongery 91 Leather Goods
- 92 Fur
- 93 Weatherproof Outerwear
- 94 Men's and Boys' Tailored Outerwear
- 95 Women's and Girls' Tailored Outerwear
- 96 Overalls and Men's Shirts, Underwear, etc.
- 97 Dresses, Lingerie, Infants' Wear, etc. 98 Hats, Caps and Millinery
- 99 Corsets and Miscellaneous Dress Industries
- 100 Gloves
- 101 Footwear 102 Bricks, Fireclay and Refractory Goods
- 103 Pottery
- 104 Glass
- 105 Cement 106 Abrasives
- 107 Miscellaneous Building Materials, etc.
- 108 Timber
- 109 Furniture and Upholstery
 110 Bedding and Soft Furnishings
 111 Shop and Office Fitting
- 112 Wooden Containers and Baskets
 113 Miscellaneous Wood and Cork Manufactures
- 114 Paper and Board
- 115 Cardboard Boxes, Cartons and Fibre-board Packing Cases
- 116 Miscellaneous Manufactures of Paper and Board 117 Printing and Publishing of Newspapers and
- 118 General Printing, Publishing, Bookbinding, Engraving, etc.
- 119 Rubber
- 120 Linoleum, Leathercloth, etc.
- 121 Brushes and Brooms
- 122 Toys, Games and Sports Equipment
- 123 Miscellaneous Stationers' Goods
- 124 Plastics Moulding and Fabricating
 125 Miscellaneous Manufacturing Industries
- 126 Construction
- 127 Gas
- 128 Electricity
- 129 Water Supply 130 Index of Products
- 131 Summary Volume
- 132 Summary Volume
- 133 Summary Volume

© Crown Copyright 1969

Printed and published by HER MAJESTY'S STATIONERY OFFICE

To be purchased from 49 High Holborn, London w.c.1 13A Castle Street, Edinburgh 2 109 St. Mary Street, Cardiff CF1 IJW Brazennose Street, Manchester M60 8AS 50 Fairfax Street, Bristol BS1 3DE 258 Broad Street, Birmingham 1 7 Linenhall Street, Belfast BT2 8AY or through any bookseller

Printed in England