

27 General chemicals (inorganic)

This Report on the General Chemicals (Inorganic) Industry relates to establishments engaged wholly or mainly in manufacturing chemical elements (including carbon) and compounds excluding those containing carbon (except for certain simple compounds such as calcium carbide, carbon disulphide and carbon dioxide). Prepared inorganic pigments, fertilisers and radio-active inorganic elements, compounds and isotopes, mixtures of chemicals and certain compounds used mainly for specific end-uses (such as hydrosulphites and hypochlorites) are excluded.

This industry corresponds to minimum list heading 271(1) in the Standard Industrial Classification (Revised 1968) which has been used for the first time as a basis of classification in the 1968 Census.

The industry was included in the General Chemicals Industry (Part 27) in the Reports on the last detailed Census of Production for 1963: together with the reports on the General Chemicals (Organic) Industry (Part 28) and the General Chemicals (other than Inorganic and Organic) Industry (Part 29) it broadly corresponds with the 1963 report on the General Chemicals Industry except that creosote/pitch mixtures for use as fuel are contained in the 1968 report on Coke Ovens and Manufactured Fuels Industry (Part 24); pharmaceutical chemicals in the Pharmaceutical Chemicals and Preparations Industry (Part 30); higher fatty alcohols in the Soap and Detergents Industry (Part 33); silicones and synthetic rubber in the Synthetic Resins and Plastics Materials and Synthetic Rubber Industry (Part 34); pigments in the Dyestuffs and Pigments Industry (Part 35); ammonium nitrate and ammonium phosphates in the Fertilisers Industry (Part 36); cellulose nitrate in the Explosives, Fireworks and Matches Industry (Part 39); and photographic developers and other compounded preparations for photographic purposes in the Photographic Chemical Materials Industry (Part 43).

Throughout this Report the figures given for 1963 have been reclassified as far as possible according to the Standard Industrial Classification (Revised 1968) so that data for 1963 and 1968 are on the same industrial basis. However the reclassification of small firms which provided limited information only, has been arbitrary. Comparability of figures between 1963 and 1968 is further affected in this industry, and elsewhere in the Chemicals Order, by differences in the reporting units of large firms engaged in distinct processes of chemical and chemical products manufacture.

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

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

(e) Administrative, technical and clerical employees.

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

(g) Acquisitions less disposals.

TABLE 1 Industry summary, 1963 and 1968 (a)
United Kingdom (b) (c)

	Unit	All establishments		
		1963	1968	
Number of enterprises	No.	142	190	
Number of establishments	"	262	306	
Gross output	£'000	228,609	341,261	
Net output	"	98,288	152,928	
Net output per head	£	2,317	3,698	
Sales and work done	{ goods produced and work done (d)	£'000	195,851	308,663
	{ merchanted goods and canteen takings	"	34,233	29,879
Purchases	{ materials for use in production and packaging and fuel	"	89,587	156,312
	{ goods for merchenting and canteen purchases	"	31,641	22,399
Payments to other organisations	{ for work done on materials given out	"	16	221
	{ for transport	"		
	{ by road	"		6,867
	{ by rail and other means excluding postal services	"	8,409	3,715
Stocks and work in progress				
Total stocks and work in progress	{ change during year	"	- 2,141	+ 3,900
	{ at end of year	"	26,467	39,820
Goods on hand for sale	{ change during year	"	- 1,626	+ 1,457
	{ at end of year	"	8,632	13,251
Work in progress	{ change during year	"	+ 151	+ 1,262
	{ at end of year	"	2,630	5,586
Materials, stores and fuel	{ change during year	"	- 667	+ 1,182
	{ at end of year	"	15,205	20,982
Number employed on average during the year	{ total, including working proprietors	Th.	42.4	41.4
	{ operatives	"	27.1	27.4
	{ other employees (e)	"	15.2	13.8
Wages and salaries	{ of operatives	£'000	22,520	32,555
	{ of other employees (e)	"	15,519	20,500
Capital expenditure (f)				
Total	"	21,560	30,382	
New building work	"	1,631	2,035	
Land and existing buildings (g)	"	- 666	- 518	
Plant and machinery (g)	"	19,601	25,806	
Vehicles (g)	"	995	3,058	

(a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.

(b) For 1968, estimates for establishments not making satisfactory returns and for small establishments, from which only employment data were collected, accounted for 4 per cent. of the total figures in which they were incorporated: of this, unsatisfactory returns accounted for 2 per cent. For 1963 the comparable figures were 2 per cent. and less than 1 per cent. respectively.

(c) The following information relates to small establishments (employing fewer than 25 persons) in this industry. It includes an estimate for small establishments not making satisfactory returns.

	1963	1968
Number of establishments	104	144
Average number employed:		
Working proprietors	102	69
Other persons employed	926	1,219

Footnotes continued on page 27/2.

TABLE 2 Analysis by size of establishment within the industry, 1968

(i) Output and employment

All establishments: United Kingdom

Number employed on average during the year by the establishment (a)	Estab-lish-ments	Enter-prises (b)	Total number employed on average during the year (a)	Gross output	Net output	Net output per head
1-5	38	38	108	..	..	..
6-10	28	27	209	..	..	..
11-24	45	37	760	..	..	..
25-49	35	24	1,373	15,194	5,240	3,819
50-99	33	18	2,496	18,377	8,096	3,243
100-199	33	19	4,714	37,554	15,816	3,355
200-299	16	9	3,892	34,851	14,537	3,735
300-399	9	8	3,133	24,816	9,542	3,046
400-749	19	15	9,227	78,610	33,663	3,648
750 and over	5	4	14,609	116,221	58,956	4,036
Unsatisfactory returns	45	42	829	..	..	..
Total	306	190	41,350	341,261(c)	152,928(c)	3,698(c)

(ii) Employees, wages and salaries

All establishments: United Kingdom

Number employed on average during the year by the establishment (a)	Employees		Wages and salaries		Wages and salaries per head	
	Oper-atives	Others (d)	Oper-atives	Others (d)	Oper-atives	Others (d)
	Number	Number	£'000	£'000	£	£
1-5	..	..	..	..	..	..
6-10	..	..	..	..	..	..
11-24	..	..	..	..	..	..
25-49	966	401	1,114	545	1,153	1,360
50-99	1,639	851	1,867	1,065	1,139	1,251
100-199	3,093	1,621	3,712	2,242	1,200	1,383
200-299	2,710	1,182	3,231	1,519	1,192	1,286
300-399	2,125	1,008	2,515	1,392	1,184	1,381
400-749	6,090	3,137	6,985	4,009	1,147	1,278
750 and over	9,584	5,025	11,682	8,839	1,219	1,759
Unsatisfactory returns	..	..	..	..	..	..
Total	27,426(c)	13,844(c)	32,555(c)	20,500(c)	1,187(c)	1,481(c)

(a) Including working proprietors.

(b) The sum of the figures for the size groups exceeds the total for the industry to the extent that enterprises made returns for establishments in more than one size group.

(c) Including estimates for establishments employing fewer than 25 persons and for establishments not making satisfactory returns.

(d) Administrative, technical and clerical employees.

TABLE 3 Percentage analysis of employees, by age and sex, 1969 (a)

All establishments: United Kingdom

Ages	Males	Females	All employees
	Per cent.	Per cent.	Per cent.
Under 18	1	1	2
18 and over	82	16	98
All ages	83	17	100

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) in the General Chemicals Industries - minimum list heading 271 - at June 1969, the earliest date for which the information is available on the basis of the Standard Industrial Classification (Revised 1968).

Footnotes to Table 4.

- (a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.
- (b) Some establishments employing fewer than 25 persons were included in returns for larger establishments. These amounted to 14 establishments in 1968 and 19 in 1963.
- (c) Including services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other other services rendered).
- (d) Direct sales of goods (excluding canteen takings) made to and work done for the general public by larger establishments are included. These amounted to £34,000 in 1968. Similar information is not available for 1963.
- (e) This is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.
- (f) Administrative, technical and clerical employees.
- (g) Excluding expenditure for establishments not yet in production.

TABLE 4 Analysis of larger establishments, 1963 and 1968 (a)

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom (b)

	Unit	1963	1968	
Number of enterprises	No.	56	60	
Number of establishments	"	176	164	
Gross output	£'000	223,797	327,503	
Net output	"	96,219	146,763	
Net output per head	£	2,317	3,698	
Sales and work done	{ goods produced and work done (c) (d)	£'000	191,728	296,220
	{ merchanted goods and canteen takings	"	33,513	28,675
Index of specialisation (d)	Per cent.	76	81	
Purchases	{ materials for processing and packaging, and fuel	£'000	87,702	150,011
	{ goods for merchenting and canteen purchases	"	30,975	21,496
	{ for work done on materials given out	"	16	212
Payments to other organisations	{ for transport	"		
	{ by road	"		6,590
	{ by rail and other means excluding postal services	"	8,232	3,566
Stocks and work in progress				
Goods on hand for sale	{ change during year	"	- 1,592	+ 1,398
	{ at end of year	"	8,451	12,717
Work in progress (e)	{ change during year	"	+ 148	+ 1,211
	{ at end of year	"	2,575	5,361
Materials, stores and fuel	{ change during year	"	- 653	+ 1,134
	{ at end of year	"	14,885	20,136
Number employed on average during the year	{ total, including working proprietors	No.	41,532	39,683
	{ operatives	"	26,641	26,364
	{ other employees (f)	"	14,879	13,308
Wages and salaries	{ of operatives	£'000	22,119	31,294
	{ of other employees (f)	"	15,221	19,707
Wages and salaries per head	{ operatives	£	830	1,187
	{ other employees (f)	"	1,023	1,481
Capital expenditure (g)				
New building work	£'000	1,596	1,953	
Land and existing buildings	{ acquisitions	"	170	186
	{ disposals	"	823	683
Plant and machinery	{ acquisitions	"	19,587	27,211
	{ disposals	"	399	2,445
Vehicles	{ acquisitions	"	1,264	3,206
	{ disposals	"	291	271

For notes to this table - see page 27/5.

TABLE 5 Sales of principal products of the industry by larger establishments, including sales by establishments classified to other industries, 1963 and 1968 (a)

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

	1963		1968			
	Quantity	Value	Quantity	Value	Enterprises	Entries
Acids	Th.tons	£'000	Th.tons	£'000	Number	Number
Hydrochloric (as at 1.14 specific gravity)	276	2,620	185	3,224	18	18
Hydrofluoric and hydrogen fluoride (in terms of HF) (b)	6.0	840	20.0	2,348	5	6
Phosphoric (ortho-, meta-, and pyro-, in terms of 100 per cent. ortho-phosphoric acid equivalent)	19.5	1,700	53.4	3,818	5	10
Sulphuric including oleum (in terms of 100 per cent. acid) (c)	1,479	12,266	1,467	13,930	25	43
Nitric (in terms of 100 per cent. acid), hydrocyanic and hydrogen cyanide (in terms of HCN), and other inorganic acids	..	5,349	..	6,161	16	28
Aluminium compounds (other than bauxite and abrasives)						
Aluminium oxide and hydroxide (in terms of Al ₂ O ₃)	31.5	996	102	3,821	6	6
Aluminium sulphate (in terms of Al ₂ O ₃)	..	2,985	178	4,586	6	7
Other inorganic aluminium compounds	..	..	..	509	9	11
Ammonium compounds, excluding sulphate, nitrate and phosphates	..	1,238	..	1,504(c)	13	15
Barium compounds (excluding natural minerals) (d)	27.5	1,380	35.2	1,960	10	10
Blacks, mineral and carbon						
Furnace black	125	8,354	177	11,731	5	5
Other (including thermal and lamp black)	5.4	337	..	519	5	5
Cadmium compounds (e)	..	888	0.6	1,204	11	11
Calcium compounds (f)	..	5,482	..	3,358	16	23
Hydrogen	..	6,572	Mn.cu.ft. 14,800	5,105	9	11
Carbon dioxide	..	..	Th.tons 277	5,097	8	21
Carbon disulphide	88.3	4,008	101	5,318	*	*
Carbon, decolourising and other active	8.1	943	9.6	1,123	*	*
Chromium compounds	..	(g)	36.2	4,431	5	7
Cobalt compounds (h)	1.9	1,035	2.1	1,727	5	5
Copper compounds						
Oxides	..	(g)	..	620	11	11
Other (including copper sulphate)	25.4	1,867(i)	..	4,710	15	17
Fullers' earth, activated	..	1,146	40.3	1,355	*	*
Iron compounds (including double salts of iron and other bases)	..	(g)	92.4	1,160	8	8
Lead compounds						
Oxides	25.9	2,207	..	4,473	5	9
Other inorganic lead compounds (excluding pigments and white lead)	2.5	324	..	1,243	13	14

Continued on next page.

TABLE 5 (continued)

	1963		1968		Enter-prises	Entries
	Quantity	Value	Quantity	Value		
	Th.tons	£'000		£'000	Number	Number
Magnesium compounds (j)	249	7,285	..	9,830	16	20
	..	456	..			
Manganese compounds	..	(g)	..	1,027	9	10
Mercury and mercury compounds (k)	..	1,054	..	4,431	5	5
Nickel compounds	..	(g)	..	313	*	*
Nitrogen	..	(l)	Mn.cu.ft. 16,122	5,686	*	10
Phosphorus and phosphorus compounds			Th.tons			
Phosphorus	..	(l)	14.0	3,370	*	*
Calcium phosphates (excluding superphosphates)	26.5	1,515	..	2,453	5	8
Sodium phosphates	..	10,848	201	14,130	*	7
Other	15.5	1,578	17.5	2,332	*	7
Potassium compounds (m)	27.3	1,983	32.8	1,816	10	14
Rare earth compounds (n)	0.5	505	..	989	5	5
Sodium and sodium compounds (o)						
Sulphate of all grades (including salt cake) in terms of anhydrous	113	1,070	111	1,444	9	10
Hydrogen sulphite (bisulphite) and metabisulphite (in terms of 60 per cent. SO ₂)			16.1	412	5	5
Silicates	..	47,956	184	4,581	7	8
Sulphite of all grades, in terms of anhydrous			..	748	5	5
Other			..	49,065	25	31
Sulphur	..	859	..	1,069	8	8
Tin compounds	0.8	541	1.3	1,173	12	12
Zinc compounds (p)	..	1,392	39.4	3,193	19	25
Other inorganic chemicals including ammonia, arsenic compounds, chlorine, hydrogen peroxide, inert gases, oxygen and silver compounds	..	55,448	..	86,044	48	80
Other products	..	1,710	..	585	9	15
Waste products	..	1,045	..	705	14	23
Work done		36		241	6	8
Total		200,927		290,670	..	..
Sales in other industries (see Table 6)		54,465		50,979	..	..
Principal products of this industry sold by establishments in the industry		146,462		239,691	60	101(q)

(a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.

(b) For 1963 described as 'Hydrofluoric acid, solutions and anhydrous, in terms of anhydrous'.

(c) Including sales returned by undertakings classified to the Gas Industry in which particulars were required from all undertakings.

(d) For 1963 described as 'Barium salts and compounds (excluding barytes and natural carbonate and pigments)'.

Footnotes continued on page 27/9.

TABLE 6 Sales of principal products of the industry by larger establishments classified to other industries, 1963 and 1968 (a)

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

	1963		1968			Principal industries in which produced (b)
	Quantity	Value	Quantity	Value	Entries	
		£'000		£'000	Number	
Sulphuric and other inorganic acids	..	6,152	..	6,129	34	28,35,36,39
Aluminium compounds (other than bauxite and abrasives)	..	849	..	442	10	28,29,35,126
Ammonium compounds excluding sulphate, nitrate and phosphates	..	182	..	247	8	29,35,39,152
Calcium compounds	..	988	Th.tons 0.8	182	10	28,29,49
Copper compounds	Th.tons 2.1	185	..	1,052	10	29,32,48,93
Lead compounds	..	1,022	..	2,907	12	29,35,49,97
Magnesium compounds	..	612	..	133	10	29,30
Phosphorus and phosphorus compounds	..	582	..	1,552	11	28,29,38
Potassium compounds	22.6	1,430	..	243	7	28,29,30,93
Sodium and sodium compounds	..	17,788	..	2,743	25	28,29,32,36
Blacks, mineral and carbon	..	24,676	..	350	*	29,34,35
Other inorganic chemicals	..		..	34,999	66	29,36,49,93
Total		54,465		50,979	..	

(a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.

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

Footnotes continued from page 27/8.

(e) For 1963 described as 'Cadmium salts and compounds, including plating salts but excluding phosphates and pigments'.

(f) For 1963 described as 'Calcium salts and compounds (other than phosphates)'.

(g) Not recorded separately for 1963.

(h) For 1963 described as 'Cobalt oxides, salts and compounds, inorganic excluding phosphates and pigments'.

(i) Copper sulphate only for 1963.

(j) For 1963 described as 'Magnesium salts and compounds (excluding phosphates)'.

(k) For 1963 described as 'Mercury, refined, and mercury salts and compounds, inorganic (excluding phosphates)'.

(l) For 1963 included with other inorganic chemicals.

(m) For 1963 described as 'Potassium salts and compounds, inorganic (excluding phosphates and compounded preparations for photographic purposes)'.

(n) For 1963 described as 'Rare earth compounds, inorganic and organic (including phosphates)'.

(o) For 1963 described as 'Sodium salts and compounds (other than water treatment compounds)'.

(p) For 1963 described as 'Zinc salts and sulphate' only.

(q) This figure represents the total number of returns made for larger establishments in this industry which is less than the total number of establishments shown in Table 4 on account of combined returns covering more than one establishment.

TABLE 7 Sales of other than principal products by larger establishments in the industry, 1963 and 1968 (a)
Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

	1963		1968	
	Quantity	Value	Quantity	Value
General chemicals		£'000	Th.tons	£'000
Organic				
Alcohols (butyl, acyclic and pentaerythritol)			1.9	357
Halogenated derivatives of hydrocarbons			36.4	3,184
Hydrocarbons, aliphatic and cyclic	..	11,583	47.2	6,414
Salts of organic acids, with inorganic bases			7.6	1,615
Other organic chemicals			..	3,711
Other than inorganic and organic	Th.tons			
Bleaching materials (excluding hydrogen peroxide)	76.8	4,164	100	5,423
Catalysts, prepared for industrial processes			..	3,720
Chemical products and preparations for metals	..	9,200	3.0	475
Other mixtures of inorganic and organic chemicals			..	8,603
Dyestuffs and pigments	..	1,880	..	1,799
Fertilizers	..	1,134	..	2,113
Formulated pesticides and disinfectants	..	1,093	..	630
Copper, brass and other copper alloys, and miscellaneous base metals	..	2,126	..	5,247
Synthetic resins and plastics materials			..	233
Other products, including steam, waste heat and electricity sold	..	9,751	..	9,094
Services rendered to other organisations (b)		4,335		3,910
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	..	32,854	..	27,928
Canteen takings		659		747
Total		78,779		85,203

(a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.

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

TABLE 8 Production of certain principal products of the industry by larger establishments, 1963 and 1968

Owing to the risk of disclosure of information relating to individual firms, details cannot be given.

TABLE 9 Purchases by larger establishments of principal products of the industry, 1968 (a)
Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

Standard Industrial Classification Minimum List Heading	Purchasing industry (b)	Total principal products
		Cost
		£'000
271/1	General chemicals (inorganic)	26,882
271/2	General chemicals (organic)	28,396
271/3	General chemicals (other than inorganic and organic)	13,642
272	Pharmaceutical chemicals and preparations	5,905
275	Soap and detergents	11,134
276	Synthetic resins and plastics materials and synthetic rubber	15,665
277	Dyestuffs and pigments	11,898
278	Fertilizers	27,004
279/7	Photographic chemical materials	12,524
311	Iron and steel (general)	14,738
411	Production of man-made fibres	13,118
463	Glass	10,293
481	Paper and board	4,473
491	Rubber	12,996
	Other industries	33,830
	Total	242,496

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

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

TABLE 10 Purchases by larger establishments in the industry, 1963 and 1968 (a)
Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production	Th.tons	£'000	Th.tons	£'000
Feedstock from petroleum (including gaseous feedstock but excluding hydrocarbons)	374	3,357	565	5,149
Crude or semi-refined benzole for refining, and crude coal tar for distillation	..	109	32	269
Crude tar acids and other derivatives of coal tar not elsewhere specified (including creosote and anthracene oils, etc, but excluding cyclic hydrocarbons)	..	137	..	207
Coal and coke other than for use as fuel	367	2,747	232	1,738
Ammoniacal liquor	..	(b)	..	269
Natural barium sulphate (barytes) and natural barium carbonate	..	114	..	345
Limestone and lime	..	1,425	..	3,329
Mercury	..	506	..	2,130
Phosphate rock (mineral phosphate of lime)	..	(b)	..	5,154
Sulphur (elemental)	..	2,165	..	5,979
Sulphur-bearing materials (including anhydrites, pyrites, spent oxide, but excluding elemental sulphur)	..	1,633	..	2,139
Silicon and silicon-bearing materials	..	75	..	299
Light metals and non-ferrous metals in all forms except finished parts, wire and scrap				
Copper (including cadmium copper)	..	(b)	15.0	5,073
Lead and alloys of lead (excluding solder) (c)	13.1	829	23.5	2,327
	..	407		
Tin	Th.cwt.		Th.cwt.	
	8.1	367	11.1	667
Zinc and zinc dust	Th.tons			
	13.4	737	..	2,467
Other metals excluding iron and steel except finished parts, wire and scrap	..	(b)	..	5,410
Animal and vegetable oils and fats	..		..	2,719
Other vegetable products	..	(d)	..	311
Other mineral products	..		..	8,194
Inorganic chemicals (including inorganic gases)				
Ammonia (in terms of 100 per cent. NH ₃), synthetic and by-product (e)	26.0	669	Th.tons	1,082
Ammonium compounds	..	(d)	..	235
Acids				
Sulphuric including oleum (in terms of 100 per cent. acid) (f)	310	2,093	255	2,209
Nitric (in terms of 100 per cent. acid)	18.4	506	7.7	229
Phosphoric (ortho-, meta-, and pyro-, in terms of 100 per cent. ortho-phosphoric acid equivalent) (g)	1.1	85	5.5	712
Calcium carbide	..	(b)	43.1	1,744
Chlorine	36.7	787	55.1	1,230

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production (continued)	Th.tons	£'000	Th.tons	£'000
Inorganic chemicals (including inorganic gases) (continued)				
Sodium carbonate (including soda crystals and soda ash)	168	2,126	283	3,932
Sodium hydroxide (caustic soda)	123	1,852	96.3	1,428
Oxygen	..	(d)	Th.cu.ft.	
			1,082	63
			..	245
Phosphorus and phosphorus compounds	..		..	3,707
Sulphur	..		..	810
Other inorganic chemicals	..	7,990	..	9,256
Organic chemicals (including dyestuffs intermediates and organic gases)				
Carboxylic acids, their anhydrides and acid halides				
Acetic acid and acetic, maleic, and phthalic anhydrides	..	66	..	316
Other	..	(d)	Th.tons	
			2.1	359
Alcohols and ether-alcohols	Th.tons			
Methanol (methyl alcohol)	0.9	37	12.1	321
Other	2.9	336	..	946
Aldehydes	..	(d)	..	183
Epoxides (ethylene oxide, propylene oxide, etc)	..		3.1	321
Halogenated derivatives of hydrocarbons	1.5	106	..	745
Hydrocarbons				
Aliphatic	..	197	368	1,151
Cyclic hydrocarbons				
Benzene (pure grades), coal tar naphthas, solvent and heavy	..		..	101
Detergent alkylates	..	611	5.3	403
Toluene (pure grades)	..		3.2	92
Other (including benzole 90's, toluole 90's)	..		..	109
Nitrogen-function compounds	..	(d)	2.4	277
Other organic chemicals	..	2,757	..	3,456
Other (eg mixtures of inorganic and organic chemicals)				
Catalysts prepared for industrial purposes	..	(d)	..	216
Other chemicals	..	2,588	..	2,929
Lubricating oils and greases	..	118	Th.gal.	
			631	163
			Th.cwt.	
			3.3	17
			..	2

Continued on next page.

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production (continued)		£'000		£'000
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement				
Tyres and other spare parts for firms' own road goods vehicles	..	4,965	..	594
Other			..	7,696
All other materials for use in production	..	15,278	..	9,621
Packaging materials				
Paper and board				
Boxes, cartons, drums and canisters (with or without metal ends) of paper and cardboard	..	562	..	571
Fibreboard packing cases			..	163
Bags and multiwall paper sacks (h)	..	1,137	..	1,767
Other packaging materials made of paper, paper board, paper coated with plastics, laminates incorporating paper but not metal, moulded pulp units and labels (excluding paper and board for converting into packaging materials) (i)	..	53	..	65
Metal				
Cans and boxes	..	55	..	120
Barrels, kegs and drums	Thousands	924	Thousands	2,023
All other packaging materials of metal including crown corks, wire, foil and any laminates incorporating foil (other than aluminium foil), foil labels and foil closures, tensional steel strappings, etc	..	470	..	56
Plastics (other than transparent regenerated cellulose film) (j)				
Film, bags, sacks and sheeting	..	44	..	323
Moulded and fabricated containers with a capacity exceeding 1 gallon and bottles and bottle caps (k)	..	145	..	317
Jute and hessian piece-goods, sacks and bags	..	564	..	356
All other packaging materials	..	742	..	329
Fuel and electricity (l)				
Coal	Th.tons	9,544	Th.tons	4,613
Coke (including screenings) and manufactured fuel	145	1,119	17.3	187
Derv fuel and motor spirit for use in road vehicles	Th.gal.	761	Th.gal.	1,173
Other liquid fuels (including creosote/pitch mixtures, etc, and liquefied petroleum gases)	62,932	2,478	..	7,168(m)
Gas	Th.therms	567	Th.therms	674
Electricity	Th.kWh	10,764	Th.kWh	19,032
Total cost of materials and fuel		87,702		150,011
Goods purchased for merchanting		30,365		20,689
Canteen purchases		610		807
Total cost of purchases		118,676		171,507

For notes to this table - see page 27/15.

TABLE 11 Transport costs and employment of larger establishments, 1963 and 1968 (a)

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	Unit	1963	1968
Average number mainly employed on transport	No.	2,737	2,676
Transport costs			
Wages and salaries	£'000	2,576	3,255
Derv fuel and motor spirit	"	761	1,173
Tyres and other spare parts for road goods vehicles	"	..	594
Payments to other organisations for transport	"	8,232	6,590
by road			
by rail and other means excluding postal services			3,566
Costs of operating road goods vehicles			
Insurance	"	131	134
Vehicle licences	"	169	366
Depreciation	"	609	1,368
Payments to other organisations for repairs and maintenance	"	304	672
Total	"	12,782(b)	17,719

(a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.

(b) Excluding tyres and other spare parts for road goods vehicles, not collected separately for 1963.

Footnotes to Table 10.

(a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.

(b) For 1963 included in all other materials for use in production.

(c) For 1963 described as 'Lead, metallic'.

(d) Not recorded separately for 1963.

(e) For 1963 described as 'Ammonia liquor (in terms of 100 per cent. ammonia) and anhydrous'.

(f) For 1963 oleum was not specifically included.

(g) For 1963 described as 'Phosphoric (in terms of 100 per cent. acid)'.

(h) Multiwall paper sacks only for 1963.

(i) For 1963 paper and board for converting into packaging materials were not specifically excluded.

(j) For 1963 described as 'Sheet, film, foams, etc wholly or mainly of polyethylene (including bags and lay flat tubing)'.

(k) For 1963 described as 'Moulded and fabricated packs and containers (eg bottles and bottle caps) wholly or mainly of polyethylene'.

(l) Owing to the risk of disclosure of information relating to individual firms the total quantities of electricity generated in firms' own establishments in this industry in 1963 and 1968 cannot be given.

(m) For 1968 may include a small amount of fuels not covered by specific headings.

TABLE 12 Payments for certain services, etc by larger establishments, 1963 and 1968 (a) (b)

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	Amounts payable	
	1963	1968
Repairs and maintenance to	£'000	£'000
Buildings	323	603
Road goods vehicles	304	672
Plant, machinery and other capital equipment	2,168	3,415
Insurance, licensing and depreciation of road goods vehicles (c)	910	1,869
Rates, excluding water rates	1,694	2,712
Hire of plant and machinery	299	1,492
Postage, telephone, telegrams, cables and telex (d)	658	830
Total	6,356	11,592

(a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.

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

(c) For details see Table 11.

(d) Excluding telex for 1963.

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger establishments, 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

Year ended	Percentage of total returns received	Percentage of total number employed
1968	Per cent.	Per cent.
April (a)	2.0	0.2
May	1.0	0.2
June	3.0	0.5
July	5.9	4.6
August	0.0	0.0
September	13.9	22.6
October	2.0	0.2
November	3.0	1.4
December	51.4	62.8
1969		
January	0.0	0.0
February	0.0	0.0
March	17.8	7.5
April (b)	0.0	0.0
	100	100

(a) From 6 April.

(b) To 5 April.