

29 General chemicals (other than inorganic and organic)

This Report on the General Chemicals (other than inorganic and organic) Industry relates to establishments engaged wholly or mainly in manufacturing chemical mixtures, excluding chemical compounds containing impurities, or to which water, solvents or stabilisers have been added solely for reasons of safety, transport or preservation. Certain organic or inorganic compounds used mainly for specific end-uses (such as hydrosulphites, hypochlorites, simple phosphate or phthalate plasticiser chemicals), nuclear fuels, and radio-active elements, compounds and isotopes are included. Pharmaceutical chemicals and preparations, dyestuffs and pesticides are excluded.

This industry corresponds to minimum list heading 271(3) 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 General Chemicals (Organic) (Part 28) and General Chemicals (Inorganic) (Part 27) it broadly corresponds with the 1963 report on the General Chemical Industry except that creosote/pitch mixtures for use as fuel are contained in the 1968 report on Coke Ovens and Manufactured Fuel (Part 24); pharmaceutical chemicals in Pharmaceutical Chemicals and Preparations (Part 30); higher fatty alcohols in Soap and Detergents (Part 33); silicones and synthetic rubber in Synthetic Resins and Plastics Materials and Synthetic Rubber (Part 34); pigments in Dyestuffs and Pigments (Part 35); ammonium nitrate and ammonium phosphates in Fertilisers (Part 36); cellulose nitrate in Explosives, Fireworks and Matches (Part 39); and photographic developers and other compounded preparations for photographic purposes in Photographic Chemical Materials (Part 43). Compound oils (perfumery bases) were included in the 1963 report on the Toilet Preparations Industry (Part 29) but are now included in this industry.

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 Chemical 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
United Kingdom (a) (b) (c)

	Unit	All establishments	
		1963	1968
Number of enterprises	No.	278	299
Number of establishments	"	328	357
Gross output	£'000	182,061	278,802
Net output	"	90,882	120,554
Net output per head	£	2,788	3,785
Sales and work done	£'000	160,725	235,980
	{ goods produced and work done (d)		
	{ merchanted goods and canteen takings	"	21,619
Net amount receivable in respect of Customs and Excise duty	"	1,299	666
Purchases	"	72,005	138,912
	{ materials for use in production and packaging and fuel		
	{ goods for merchenting and canteen purchases	"	18,716
	{ for work done on materials given out	"	249
Payments to other organisations	"		
	{ for transport		
	{ by road	"	3,026
	{ by rail and other means excluding postal services	"	544
Stocks and work in progress	"		
Total stocks and work in progress	"	+ 433	+ 22,323
	{ change during year		
	{ at end of year	"	23,097
Goods on hand for sale	"	- 154	+ 3,968
	{ change during year		
	{ at end of year	"	9,605
Work in progress	"	- 128	+ 6,123
	{ change during year		
	{ at end of year	"	2,657
Materials, stores and fuel	"	+ 714	+ 12,231
	{ change during year		
	{ at end of year	"	10,836
Number employed on average during the year	Th.	32.6	31.8
	{ total, including working proprietors		
	{ operatives	"	19.7
	{ other employees (e)	"	12.7
Wages and salaries	£'000	15,082	19,905
	{ of operatives		
	{ of other employees (e)	"	14,784
Capital expenditure (f)	"		
Total	"	11,939	18,425
New building work	"	2,940	1,503
Land and existing buildings (g)	"	163	- 43
Plant and machinery (g)	"	8,439	16,321
Vehicles (g)	"	396	644

(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 8 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 6 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	204	234
Average number employed:		
Working proprietors	219	177
Other persons employed	1,788	2,063

Footnotes continued on page 29/2.

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	83	79	259	..	..	..
6-10	58	58	433	..	..	..
11-24	88	79	1,504	..	..	..
25-49	33	33	1,165	10,241	3,478	2,985
50-99	27	25	1,787	13,480	5,876	3,288
100-199	26	21	3,395	36,711	13,462	3,965
200-299	8	7	1,994	24,769	8,842	4,434
300-399	6	6	1,989	19,776	5,911	2,972
400-499	3	3	1,337	11,200	4,318	3,230
500-749	5	4	3,142	18,292	10,603	3,375
750-999	4	4	3,169	32,181	10,383	3,276
1,000 and over	5	3	11,209	89,024	47,753	4,261
Unsatisfactory returns	11	11	465	..	..	..
Total	357	299	31,848	278,802(c)	120,554(c)	3,785(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	701	448	624	625	890	1,395
50-99	961	822	970	1,037	1,009	1,261
100-199	1,812	1,583	1,640	2,181	905	1,378
200-299	1,201	793	1,355	1,016	1,129	1,281
300-399	1,120	869	1,159	1,071	1,035	1,233
400-499	678	659	722	1,027	1,065	1,559
500-749	1,613	1,529	1,543	3,280	956	2,146
750-999	1,670	1,499	1,854	2,038	1,110	1,359
1,000 and over	7,204	4,004	8,493	6,964	1,179	1,739
Unsatisfactory returns	..	..	..	..	..	..
Total	18,391(c)	13,260(c)	19,905(c)	20,887(c)	1,082(c)	1,575(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) 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 10 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 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 £35,000 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) Customs and Excise duty paid on goods of firms' own manufacture where these were sold duty paid was £47,000 in 1963 and £70,000 in 1968. The value of rebates in respect of alcohol used in the manufacture of medicinal preparation and of drawbacks reduced in respect of products exported was £1,271,000 in 1963 and £683,000 in 1968.
- (g) Administrative, technical and clerical employees.
- (h) Excluding expenditure for establishments not yet in production.

TABLE 4 Analysis of larger establishments, 1963 and 1968

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

	Unit	1963	1968	
Number of enterprises	No.	97	88	
Number of establishments	"	141	127	
Gross output	£'000	171,569	256,444	
Net output	"	85,644	110,886	
Net output per head	£	2,788	3,785	
Sales and work done	{ goods produced and work done (c) (d)	£'000	151,462	217,056
	{ merchanted goods and canteen takings	"	20,373	30,106
Index of specialisation (e)	Per cent.	72	79	
Net amount receivable in respect of Customs and Excise duty (f)	£'000	1,224	613	
Purchases	{ materials for use in production and packaging, and fuel	"	67,855	127,772
	{ goods for merchenting and canteen purchases	"	17,637	24,982
Payments to other organisations	{ for work done on materials given out for transport	"	235	1,384
	{ by road	"	2,095	2,783
	{ by rail and other means excluding postal services	"			500
Stocks and work in progress				
Goods on hand for sale	{ change during year	"	- 145	+ 3,650
	{ at end of year	"	9,051	18,123
Work in progress	{ change during year	"	- 121	+ 5,632
	{ at end of year	"	2,504	26,581
Materials, stores and fuel	{ change during year	"	+ 673	+ 11,251
	{ at end of year	"	10,211	32,485
Number employed on average during the year	{ total including working proprietors	No.	30,710	29,294
	{ operatives	"	18,655	17,010
	{ other employees (g)	"	12,039	12,264
Wages and salaries	{ of operatives	£'000	14,303	18,410
	{ of other employees (g)	"	14,025	19,319
Wages and salaries per head	{ operatives	£	767	1,082
	{ other employees (g)	"	1,165	1,575
Capital expenditure (h)				
New building work	£'000	2,771	1,382	
Land and existing buildings	{ acquisitions	"	198	76
	{ disposals	"	44	115
Plant and machinery	{ acquisitions	"	7,976	15,117
	{ disposals	"	23	105
Vehicles	{ acquisitions	"	546	852
	{ disposals	"	173	260

For notes to this table - see page 29/5.

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		Enter-prises	Entries
	Quantity	Value	Quantity	Value		
Radioactive and isotopically labelled elements and compounds (inorganic)		£'000		£'000	Number	Number
Artificially enriched	..	1,057	..	2,265	*	*
Other	..	226	..	22	*	*
Radioactive and isotopically labelled compounds artificially enriched (organic) (b)	..	374	..	1,013	*	*
Additives for liquid fuels and lubricating oils	Th.tons		Th.tons			
Antiknock compounds			76.3	20,765	*	*
Lubricating oil additives	119	26,211	117	19,410	15	20
Other (eg oxidation inhibitors for gasolines, metal deactivators)			8.2	1,711	13	14
Anti-freeze mixtures for internal combustion engines (including inhibited grades of ethanediol (ethylene glycol) but excluding pure ethanediol)	17.2	2,228	21.5	2,183	29	31
	..	838	..	704		
Bleaching materials (excluding hydrogen peroxide) (c)						
Hydrosulphites (dithionites) and related compounds, organic and inorganic	12.2	1,835	16.0	2,954	6	6
	..	953				
Hypochlorites			..	5,357	11	12
Other bleaching materials (including bleaching powder (chloride of lime) peroxides, peroxy salts and compounded bleaching agents, but excluding sulphites and fluorescent brightening agents)	246	9,724	89.5	6,904	*	7
Catalysts, prepared for industrial processes (other than activators for catalysts)	..	4,430	..	12,325	19	22
Ceramic colours, glazes and vitreous enamel frits						
Ceramic colours						
For glass and clayware	0.9	876	..	2,068	7	10
For vitreous enamels	0.2	207	0.3	341	5	5
Ceramic glazes for clayware	15.4	1,105	17.3	1,333	10	14
			..	1,146		
Vitreous enamel frits						
For dry process cast iron	6.7	687	4.0	420	*	*
For wet process cast iron	4.8	432	3.3	330	6	6
For sheet steel and other metals	12.4	1,271	13.7	1,540	8	8
Chemical products and preparations for fire extinguishing	..	156	..	1,467	6	8
Chemical products and preparations for metals (including pickling preparations, fluxes and auxiliary preparations for soldering, brazing and welding (including powders and pastes consisting of metal and other materials; core and coating preparations for welding rods and electrodes) and heat treatment salts) (d)	..	1,933	..	12,095	22	30

Continued on next page.

TABLE 5 (continued)

	1963		1968			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
Chemical products and preparations mainly for polyvinyl chloride processing (e)	Th.tons	£'000	Th.tons	£'000	Number	Number
Plasticisers, mixed or unmixed						
Phthalates of alcohols of one to five carbon atoms	66.6	10,260	..	1,805	7	9
Phthalates of alcohols of six carbon atoms and above			86.8	13,115	10	12
Phosphate plasticisers	20.1	3,712	23.7	4,624	5	6
Plasticiser esters of adipic, sebacic, azelaic and mixed acids	12.6	3,009	..	1,963	5	5
Polymeric plasticisers			0.8	411	*	*
Epoxydised oils			1.9	464	*	*
Epoxydised esters			4.0	842	*	*
Other plasticisers (excluding acrylates and maleates)	12.6	3,009	1.1	436	*	*
Unclassified plasticisers except phthalates of alcohols and phosphate plasticisers			..	401	*	*
Chemicals put up or prepared for laboratory use (other than radioactive and isotopically labelled chemicals)	..	2,416	..	7,125	13	14
Finings and other preparations for the brewery and similar trades (excluding isinglass)	..	446	..	146	*	*
Food and perfume materials	Th.cwt.		Th.cwt.			
Compound oils (perfumery bases) sold as such	53.6	6,093	68.8	8,652	14	16
Confectioners' colours and other dyes for foods etc	..	487	..	581	9	10
Essential oils (natural, other than turpentine)	Th.lb. 977	1,022	..	1,833	8	10
Essences and flavouring compounds for foods etc	..	6,145	..	8,240	33	42
Perfumery chemicals, synthetic	..	2,851	..	7,284	11	17
Rubber processing chemicals and preparations (excluding fillers and carbon black)	Th.tons		Th.tons			
Rubber accelerators	11.9	4,886	16.3	6,477	7	8
Rubber antioxidants	9.2	4,859	14.1	7,370	*	5
Factice	8.2	1,753	..	279	*	*
Other rubber processing chemicals and preparations (eg anti-scorching, softening agents)			14.3	2,991	13	14
Surface active materials (other than washing and scouring preparations) including wetting and emulsifying agents, and sulphonated or sulphated oils, alcohols and hydrocarbons	97.2	11,838	127	18,220	69	77
			..	3,040		
Tanning agents (synthetic) and chemicals for use in tanning	35.3	2,287	26.2	1,681	8	8
Textile auxiliaries (eg sizes, combing oils, but excluding surface active materials)	..	4,610	..	5,071	21	26

TABLE 5 (continued)

	1963		1968			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
Water treatment chemicals and preparations, (including chemicals specifically put up for this purpose) (f)	..	1,758	..	3,398	19	20
Mixtures of organic and inorganic chemicals and chemical products	..	43,510	..	17,576	54	58
Other products			..	29,402	21	24
Waste products	..	237	..	714	13	14
Work done		634		1,294	20	22
Total		168,424		251,791	..	..
Sales in other industries (see Table 6)		59,833		81,144	..	..
Principal products of this industry sold by establishments in the industry		108,591		170,647	86	108(g)

- (a) The 1963 and 1968 figures in this table are not strictly comparable - see paragraph 4 of the introduction to this report.
- (b) Not specifically described as artificially enriched for 1963.
- (c) Hydrogen peroxide is included in the report on the General Chemicals (Inorganic) Industry (Part 27).
- (d) For 1963 includes 'fluxes for metals, etc, and heat treatment salts' only.
- (e) For 1963 described as 'Plasticisers, not elsewhere specified'.
- (f) For 1963 described as 'Water treatment compounds (including boiler compositions, etc)'.
- (g) This figure represents the total number of returns made by 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 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			
	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (b)
Additives for liquid fuels and lubricating oils	Th.tons	£'000	Th.tons	£'000	Number	
Lubricating oil additives	18.6	3,235	59.3	9,808	12	27,28,34
Other (eg oxidation inhibitors for gasolines, metal deactivators (but excluding anti-knock compounds))			6.7	1,281	8	27,28,30
Bleaching materials (excluding hydrogen peroxide)	..	10,430	..	6,535	12	27,28,35,40
Catalysts, prepared for industrial processes (other than activators for catalysts)	..	1,963	..	5,137	16	27,28,36,93
Chemical products and preparations for metals (including pickling preparations, fluxes and auxiliary preparations for soldering, brazing and welding (including powders and pastes consisting of metal and other materials; core and coating preparations for welding rods and electrodes) and heat treatment salts)	..	1,900	..	6,185	20	27,32,49,93
Chemical products and preparations mainly for polyvinyl chloride processing						
Plasticisers, mixed and unmixed						
Phthalates of alcohols of six carbon atoms and above	37.8	6,203	44.0	6,832	*	27,28,34
Other plasticisers			..	3,104	16	28,32,34
Food and perfume materials			Th.cwt.			
Compound oils (perfumery bases) sold as such	..	2,941	2.0	255	5	18,30,31
Essences and flavouring compounds for food, etc			..	2,283	27	14,18,20,27
Perfumery chemicals, synthetic			..	571	6	18,28
Surface active materials (other than washing and scouring preparations) including wetting and emulsifying agents, and sulphonated or sulphated oils, alcohols and hydrocarbons	69.0	7,474	Th tons	10,103	57	(c)
			84.2	2,163		
Textile auxiliaries (eg sizes, combing oils, but excluding surface active materials)	..	2,914	..	3,811	18	27,28,34,35
Water treatment chemicals and preparations (including chemicals specifically put up for this purpose)	..	994	..	1,110	10	27,28,30,34
Ceramic colours, glazes and vitreous enamel frits	..	21,779	..	554	8	27,64,93,126
Rubber processing chemicals and preparations (excluding fillers and carbon black)			..	6,955	17	28,34,35,144
Other products, including mixtures of organic and inorganic chemicals and chemical products	..		..	14,458	86	(c)
Total		59,833		81,144	..	

(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.

(c) Production is widely distributed.

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
		£'000		£'000
Miscellaneous food products	..	855	..	440
Soft drinks and fruit juices	..	677	..	989
General chemicals (inorganic)				
Acids	..	4,223	..	272
Copper compounds			..	275
Lead compounds			..	1,006
Phosphorous and phosphorous compounds			Th.tons	
Sodium and sodium compounds			1.6	220
Other inorganic chemicals			96.7	1,322
General chemicals (organic)			..	2,820
Acids	..	9,702	..	1,634
Esters			..	780
Halogenated derivatives of hydrocarbons			4.8	489
Nitrogen-function organic compounds			1.9	412
Other organic chemicals			..	2,904
Pharmaceutical chemicals and preparations	..	3,326	..	1,337
Products of the paint industry	..	604	..	891
Soap, detergents and glycerine	..	1,352	..	2,243
Synthetic resins and plastic materials	..	3,533	..	509
Dyestuffs and pigments	..	2,876	..	3,029
Formulated pesticides and disinfectants	..	821	..	5,404
Non-ferrous base metals	..	14,508	..	1,839
Other products, including electricity sold			..	12,370
Services rendered to other organisations (b)		394		5,226
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	..	19,906	..	29,616
Canteen takings		467		490
Total		63,244		76,515

(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

This table is not applicable to this industry.

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	Purchasing industry (b)	Total principal products (c)
		Cost
		£'000
217	Cocoa, chocolate and sugar confectionery	2,971
218	Fruit and vegetable products	3,783
232	Soft drinks	4,715
262	Mineral oil refining	3,946
263	Lubricating oils and greases	2,695
271/1	General chemicals (inorganic)	2,939
271/2	General chemicals (organic)	6,350
271/3	General chemicals (other than inorganic and organic)	11,844
272	Pharmaceutical chemicals and preparations	9,291
273	Toilet preparations	5,947
275	Soap and detergents	10,321
276	Synthetic resins and plastics materials and synthetic rubber	9,997
311	Iron and steel (general)	5,843
399/8	Miscellaneous metal goods	4,729
423	Textile finishing	2,905
431	Leather (tanning and dressing) and fellmongery	3,723
462	Pottery	3,013
491	Rubber	8,192
492	Linoleum, plastics floor-covering, leather-cloth, etc	7,688
496	Plastics products	2,005
603	Water supply	1,970
	Other industries	21,108
	Total	135,977

(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.

(c) Mixtures of inorganic and organic chemicals.

TABLE 10 Purchases by larger establishments in the industry, 1963 and 1968

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
Crude tar acids and other derivatives of coal tar not elsewhere specified (including creosote and anthracene oils, etc, but excluding cyclic hydrocarbons and phenol)	..	1,340	..	1,263
Essential oils (other than turpentine)	..	3,971	..	3,892
Sulphur (elemental) and sulphur-bearing materials (including anhydrites, pyrites, spent oxide)	..	159	..	129
Salt and brine	..	480	..	510
Silicon and silicon-bearing materials	..	95	..	360
Light metals and non-ferrous metals in all forms except finished parts, wire and scrap				
Aluminium and aluminium alloys	..	(b)	1.5	391
Copper (including cadmium copper)	..	(b)	0.6	361
Lead and alloys of lead (excluding solder) (c)	34.7	2,268	50.9	5,390
Nickel and nickel alloys (excluding nickel silver and cupro nickel)	..	(b)	0.8	780
Zinc and zinc dust	2.7	246	0.9	97
Other metals	..	346(d)	..	1,123
Animal and vegetable oils and fats	..	884(d)	..	4,166
Other vegetable products	..	(b)	..	1,413
Other mineral products	..	63(d)	..	855
Inorganic chemicals (including inorganic gases)				
Ammonia (in terms of 100 per cent. NH ₃) synthetic and by-product (e)	..	68	3.2	101
Acids				
Sulphuric including oleum (in terms of 100 per cent. acid) (f)	18.0	151	22.4	254
Nitric (in terms of 100 per cent. acid)	0.8	26	9.3	169
Phosphoric (ortho-, meta-, and pyro-, in terms of 100 per cent. ortho-phosphoric acid equivalent) (g)	0.5	67	1.5	218
Aluminium oxide and hydroxide (in terms of Al ₂ O ₃) (h)	1.3	152	5.9	258
Sodium carbonate (including soda crystals and soda ash)	12.2	161	..	461
Sodium hydroxide (caustic soda)	35.1	729	59.5	1,198
Ammonium compounds	..	..	1.2	136
Phosphorus and phosphorus compounds	..	4,215	8.8	909
Other inorganic chemicals	..	..	..	9,938
Organic chemicals (including dyestuffs intermediates and organic gases)				
Alcohols and ether-alcohols				
Ethanol (ethyl alcohol)				
Duty paid	0.3	852	0.1	902
Duty free	..	564	..	120
Butanol (butyl alcohol)	1.5	99	2.1	151
Other	2.6	292	1.8	155
Other	36.2	3,895	46.9	5,723
			..	67

Continued on next page.

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
	Th.tons	£'000	Th.tons	£'000
Materials for use in production (continued)				
Organic chemicals (including dyestuffs intermediates and organic gases) (continued)				
Halogenated derivatives of hydrocarbons				
Chlorinated	13.2	856	17.6	1,132
Other	..	(i)	22.6	3,398
Hydrocarbons				
Aliphatic				
Acetylene (not dissolved), ethane and ethylene			23.8	1,036
Propane, propene (propylene), butanes, butenes (butylenes), and butadienes	..	1,894	3.3	177
C ₅ and higher aliphatic hydrocarbons (heptenes, dilsobutylene, propylene tetramer, etc)			28.4	1,863
Cyclic hydrocarbons				
Detergent alkylates			2.6	256
Toluene (pure grades)	..	2,675	4.5	147
Other (including benzole 90's, toluole 90's)			11.8	556
Ketones	2.3	134	..	273
Phenols and their salts (j)	3.3	262	15.6	1,450
Carboxylic acids, their anhydrides and acid halides				
Acetic acid and acetic anhydride	4.9	465	1.6	173
Phthalic anhydride	13.7	1,155	19.6	2,252
Other			6.0	1,370
Aldehydes			9.2	775
Epoxides (ethylene oxide, propylene oxide etc)	..	11,843	17.2	1,693
Esters			2.3	512
Nitrogen-function compounds			3.8	961
Other organic chemicals			..	8,801
Other (eg mixtures of inorganic and organic chemicals) (k)				
Catalysts prepared for industrial purposes			..	202
Surface active materials (other than washing and scouring preparations), including wetting and emulsifying agents and sulphonated or sulphated oils, alcohols and hydrocarbons	..	4,322	..	787
Other chemicals			..	6,963
Dyestuffs for blending and further processing	..	(b)	..	1,017
Lubricating oils and greases	Th.gal.	106	Th.gal.	72
	783		442	
	Th.cwt.		Th.cwt.	
	3.1		8.4	23
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	..	810	..	134
Other			..	3,162
All other materials for use in production	..	13,536	..	29,700

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
		£'000		£'000
Packaging materials				
Paper and board				
Boxes, cartons, drums and canisters (with or without metal ends) of paper and cardboard	..	452	..	428
Fibreboard packing cases			..	283
Bags and multiwall paper sacks (l)	..	184	..	287
Wrapping and packing paper and other packaging materials of paper and paperboard (including paper coated with plastics and any laminates incorporating paper but not metal and moulded pulp units and labels but excluding paper and board for converting into packaging materials)(m)	..	101	..	189
Metal				
Cans and boxes	..	414	..	514
	Thousands		Thousands	
Barrels, kegs and drums	1,203	1,482	1,549	1,800
			..	427
Aluminium collapsible tubes, aluminium foil, and any laminates incorporating aluminium foil and aluminium foil labels and closures, and other packaging materials of metal including crown corks, wire, foil and any laminates incorporating foil, foil labels and foil closures, tensional steel strappings, etc	..	79	..	124
Containers wholly or mainly of wood (including plywood boxes and drums), baskets and wickerwork crates and other wood products for packaging (including wood wool but excluding timber (sawn or planed) or plywood for manufacture into packing cases)	..	122	..	226
Glass containers (including glass syphons)	17,822	532	5,489	137
			..	85
Plastics (other than transparent regenerated cellulose film)				
Film, bags, sacks, sheets and sheeting	..	43	..	162
Moulded and fabricated containers including closures and inserts but excluding re-usable crates	..	334	..	1,850
All other packaging materials	..	273	..	217
Fuel and electricity (n)	Th.tons			
Coal	90.0	445	..	1,752
Coke (including screenings) and manufactured fuel	3.5	25	..	29
	Th.gal.		Th.gal.	
Derv fuel and motor spirit for use in road vehicles	779	152	926	239
Other liquid fuels (including creosote/pitch mixtures, etc, and liquefied petroleum gases)	38,507	1,411	44,801	1,943(o)
			..	73
	Th.therms		Th.therms	
Gas	2,858	184	4,361	291
	Th.kWh		Th.kWh	
Electricity	528,704	2,433	1,628,736	6,342
Total cost of materials and fuel		67,855		127,772
Goods purchased for merchanting		17,388		24,444
Canteen purchases		250		537
Total cost of purchases		85,492		152,754

For footnotes to this table - see page 29/16.

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

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

	Unit	1963	1968
Average number mainly employed on transport	No.	503	636
Transport costs			
Wages and salaries	£'000	394	728
Derv fuel and motor spirit	"	152	239
Tyres and other spare parts for road goods vehicles	"	..	134
Payments to other organisations for transport	{ by road by rail and other means excluding postal services	{ 2,095	{ 2,783 500
Costs of operating road goods vehicles			
Insurance	"	23	31
Vehicle licences	"	36	67
Depreciation	"	238	217
Payments to other organisations for repairs and maintenance	"	74	119
Total	"	3,011(b)	4,819

(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) Not recorded separately for 1963.

(c) For 1963 described as 'Lead Metallic'.

(d) So far as separately recorded.

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

(f) Oleum was not specifically included for 1963.

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

(h) For 1963 described as 'Aluminium oxide anhydrous (alumina) and hydrated (aluminium hydroxide)'.

(i) Included with 'Other organic chemicals' for 1963.

(j) Salts were not specifically included for 1963.

(k) For 1963 described as 'Other heavy chemicals'.

(l) For 1963 bags were not included.

(m) Paper and board for converting into packaging materials were not specifically excluded for 1963.

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

(o) 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	191	427
Road goods vehicles	74	119
Plant, machinery and other capital equipment	835	1,315
Insurance, licensing and depreciation of road goods vehicles (c)	297	315
Rates, excluding water rates	1,004	1,611
Hire of plant and machinery	150	244
Postage, telephone, telegrams, cables and telex (d)	508	754
Total	3,059	4,784

(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)	-	-
May	0.9	0.1
June	2.7	1.5
July	0.9	0.2
August	-	-
September	4.5	0.9
October	6.4	1.8
November	1.8	1.4
December	61.0	50.5
1969		
January	1.8	2.2
February	3.6	3.1
March	16.4	38.3
April (b)	-	-
	100	100

(a) From 6 April.

(b) To 5 April.

TABLE 12
 Analysis of certain assets of the corporation, as of the date of the balance sheet, and the percentage of the total assets represented by each asset

Asset	Amount	Percentage
Total	\$1,248,000	100%
Plant, including buildings, machinery, and other tangible assets	500,000	40%
Inventory, including raw materials and finished goods	350,000	28%
Accounts receivable	150,000	12%
Prepaid expenses and other assets	248,000	20%

(a) The 1953 and 1954 figures in this table are not strictly comparable with those of the preceding years because of the inclusion of the 1953 and 1954 figures in the total assets.
 (b) No reduction is made for "other" assets in the 1953 and 1954 figures in this table.

TABLE 13
 Analysis of certain assets of the corporation, as of the date of the balance sheet, and the percentage of the total assets represented by each asset

Year ended	Percentage of total assets represented	Percentage of total assets represented
	For 1953	For 1954
April (a)		
May	0.8	0.1
June		
July	0.9	
August		
September		
October		
November		
December		
1955		
January		
February		
March		

(a) From 4 April.
 (b) To 4 April.