



BOARD OF TRADE

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THE REPORT  
on the  
CENSUS OF PRODUCTION  
FOR 1951

Volume 2

Trade C

FERTILISER, DISINFECTANT, INSECTICIDE  
AND ALLIED TRADES

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\* Not applicable to this trade

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## FERTILISER, DISINFECTANT, INSECTICIDE AND ALLIED TRADES

THIS REPORT on the Fertiliser, Disinfectant, Insecticide and Allied Trades relates to establishments engaged wholly or mainly in the manufacture of artificial manures, fertilisers, disinfectants, insecticides, sheep and cattle dips and weedkillers, including two Government establishments in each post-war year.

These trades correspond to minimum list heading 31 (2) in the Standard Industrial Classification.

The figures shown for these trades for 1951 are not wholly comparable with those for earlier years, as one section of the trade, which was previously returned in the Chemicals (General) Trade is now included in this report. This does not effect the figures in Table 8, which show the total sales of principal products of these trades, including sales by establishments classified to other trades. Its effect is mainly on the summary particulars - gross and net output, employment, wages and salaries, etc., which for 1951 give a more comprehensive picture of these trades as a whole than the figures for the years 1948 to 1950. The gross output of the section that was previously not covered in these trades accounted for approximately one-fifth of the total gross output for 1951.

IMPORTANT NOTES and definitions appear on the inside of the back cover of this report. In interpreting the data in the following tables, it is essential to bear these in mind.

## FERTILISER, DISINFECTANT, INSECTICIDE AND ALLIED TRADES

## Summary

## Larger establishments (a)

TABLE 1

	United Kingdom			Great Britain		United Kingdom	
	1951	1950	1949	1949	1948	1937	1935
Gross output (production) (b)	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Amount receivable in respect of	61,336	37,284	33,108	32,143	30,945	6,132	5,362
General Charges Allowance	1,338	2,689	2,580	2,580(c)	2,011	-	-
Government Early Delivery Rebate	152	231	217	217(c)	167	-	-
Government Compound Rebate	135	133	132	132(c)	135	-	-
Cost of materials and fuel used (d)	39,631	26,254	23,139	22,516	21,112	3,807	3,225
Payment for work done on materials given out	138	104	107	107	164	1	1
Amount payable in respect of levies	-	1,433	1,425	1,425(c)	1,207	-	-
Transport payments (e)	2,797	..	..	..	..	..	..
Net output	20,395	12,547	11,367	10,958	10,773	2,324	2,136
Wages and salaries of persons employed	9,016	5,672	5,580	5,395	5,050	..	..
Average number of persons employed (f)	No.	No.	No.	No.	No.	No.	No.
	21,421	15,370	15,887	15,306	15,254	6,979	6,577
Net output per person employed (f)	£	£	£	£	£	£	£
	952	816	715	716	706	333	325
Stocks at end of year	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Products on hand for sale and work in progress	3,412	1,846	2,207	2,120	1,809	..	..
Materials and fuel	6,998	3,711	3,898	3,812	3,595	..	..
Number of establishments	No.	No.	No.	No.	No.	No.	No.
	174	180	172	169	172	..	123

The values of gross output and of materials and fuel used are derived in the following way:-

	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Output of firms in this trade (g)	55,843	38,606	33,729	32,784	29,307	5,587	4,966
Principal products (h)	4,811				2,223	545	396
Other output (i)							
Changes in stocks and work in progress (j)	+ 682	- 290	+ 318	+ 283	+ 285		
	61,336	38,316	34,047	33,067	31,815	6,132	5,362
Less payment for transport outwards (e)	..	1,033	939	924	870		
Gross output (production)	61,336	37,284	33,108	32,143	30,945	6,132	5,362
Materials and fuel used by firms in this trade							
Purchases	42,343	26,042	23,371	22,731	21,445	3,807	3,225
Changes in stocks (j)	- 2,713	+ 212	- 233	- 214	- 333		
Materials and fuel used	39,631	26,254	23,139	22,516	21,112	3,807	3,225

- (a) For small firms' summary see Table 2.  
 (b) Gross output for 1951 includes payments to other firms and undertakings and to firms' own separate transport organisations for transport services. For other years payments for transport services outwards on finished goods sold are excluded.  
 (c) Including particulars in respect of Northern Ireland.  
 (d) Amounts paid for delivery services are excluded for 1951 but included for other years.  
 (e) Payments to other firms and undertakings and to firms' own separate transport organisations. For 1951 they cover payments for transport of both goods sold and materials and fuel purchased. For other years payments cover only transport outwards of finished goods sold.  
 (f) Excluding outworkers but including working proprietors. For an estimate of the total number of persons employed in this trade see Table 3.  
 (g) Total value of sales (1951, 1950, 1949 and 1948) or production for sale (1937 and 1935).  
 (h) For details for 1951 and 1948 see Table 8.  
 (i) For details for 1951 and 1948 see Table 10.  
 (j) For details for 1951 see Table 21.

## Summary

## Small firms (a)

TABLE 2

	Great Britain		United Kingdom	Great Britain	
	1951	1950	1949	1949	1948
Number of returns	191	214	224	218	165
Average number of persons employed (b)					
Males	955	981	995	965	771
Females	214	263	235	223	177
Total	1,169	1,244	1,230	1,188	948

- (a) Small firms (employing on the average ten or fewer persons) that made satisfactory returns. No information about small firms was collected in Northern Ireland for 1951 or 1950.  
 (b) Including working proprietors.

## Estimated average employment (a)

## All firms

TABLE 3

	United Kingdom			Great Britain	
	1951	1950	1949	1949	1948
As returned by firms					
Employing on the average more than ten persons (b)	21,421	15,370	15,887	15,306	15,254
Employing on the average ten or fewer persons (c)	1,169(d)	1,244(d)	1,230	1,188	948
Estimated average employment in firms not making satisfactory returns	22,590	16,614	17,117	16,494	16,202
	67	104	81	81	332
Estimated average employment in all firms	22,657(d)	16,718(d)	17,198	16,575	16,534

- (a) Including working proprietors.  
 (b) See Tables 13(iv) and 14.  
 (c) See Table 2.  
 (d) Excluding any small firms in Northern Ireland.

## Analysis by size, 1951

## Larger establishments in the United Kingdom

TABLE 4

Average number employed	Establishments	Gross output	Net output	Persons employed	Remuneration			Net output per person employed
					Operatives	Other employees (a)	Total	
	No.	£'000	£'000	No.	£'000	£'000	£'000	£
11 - 24	47	2,333	626	812	171	129	300	770
25 - 49	47	4,626	1,369	1,737	388	228	617	788
50 - 99	31	6,749	1,852	2,217	546	342	888	835
100 - 199	27	12,899	3,697	3,876	1,004	561	1,565	954
200 - 299	14	9,771	3,284	3,360	851	432	1,283	977
300 and over	8	24,958	9,568	9,419	3,011	1,353	4,364	1,016
Total	174	61,336	20,395	21,421	5,971	3,045	9,016	952

- (a) Administrative, technical and clerical employees.

Analysis by standard region, 1951

Larger establishments in the United Kingdom

TABLE 5

Region	Establishments	Gross output	Net output		Persons employed	Remuneration			Net output per person employed
			Value	Percentage of total		Operatives	Other employees (a)	Total	
	No.	£'000	£'000		No.	£'000	£'000	£'000	£
England and Northern Ireland									
Northern; and Northern Ireland	15	19,181	8,004	39.2	8,056	2,703	1,081	3,784	994
East and West Ridings	18	5,417	1,624	8.0	1,945	376	332	708	835
North Midland	19	5,773	1,627	8.0	1,653	493	185	678	985
Eastern	17	6,975	2,219	10.9	2,067	544	315	860	1,073
London and South Eastern	25	5,278	1,563	7.7	1,970	439	341	779	793
Southern; and South Western	8	3,292	857	4.2	710	208	98	306	1,207
Midland	5	307	94	0.5	136	25	21	46	688
North Western	20	3,455	1,084	5.3	1,423	342	185	527	762
Total England and Northern Ireland	127	49,678	17,073	83.7	17,960	5,130	2,558	7,688	951
Wales	8	972	377	1.8	417	141	26	167	903
Scotland	39	10,686	2,946	14.4	3,044	700	461	1,161	968
United Kingdom	174	61,336	20,395	100.0	21,421	5,971	3,045	9,016	952

(a) Administrative, technical and clerical employees.

Analysis according to specialisation within the trade, 1951

Larger establishments in the United Kingdom

TABLE 6

	Establishments	Gross output	Sales of characteristic products	Net output	Persons employed	Remuneration			Net output per person employed
						Operatives	Other employees (a)	Total	
	No.	£'000	£'000	£'000	No.	£'000	£'000	£'000	£
Specialist producers of Fertilisers	121	49,365	44,870	15,798	16,458	5,061	2,127	7,187	960
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips, and like products	53	11,971	10,235	4,597	4,963	910	918	1,828	927
Total	174	61,336		20,395	21,421	5,971	3,045	9,016	952

(a) Administrative, technical and clerical employees.

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Total make of intermediate products

Larger establishments

TABLE 7

Principal products	Returned in this trade		Returned in all trades			
	United Kingdom 1951		Great Britain 1948	United Kingdom 1951		Great Britain 1948
	Quantity	Entries	Quantity	Quantity	Entries	Quantity
	Th. tons	No.	Th. tons	Th. tons	No.	Th. tons
Fertilisers, prepared or manufactured						
Simple fertilisers						
Phosphatic						
Basic slag, ground	480.4	11	427.9	870.0	24	685.8(a)
Phosphate rock, ground	583.8	36	706.9	583.8	36	707.7
Superphosphate of lime	(b)	..	1,000.5	833.8	41	1,034.7
Nitrogenous						
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen)	753.3	..	305.1	1,050.8	80	995.4
Other, including nitro-chalk but excluding nitrate of ammonia	(b)	..	15.8	284.9	11	233.3
Other products						
Sulphuric acid (c)	241.4	20	169.9			

(a) Corrected figure.

(b) Owing to the risk of disclosure of information relating to individual firms, separate particulars cannot be given.

(c) For total make returned in all trades see the Chemicals (General) Trade (Volume 2, Trade E).

Sales of the principal products of the trade, including sales of these products by establishments classified to other trades

Larger establishments

TABLE 8

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Fertilisers, prepared or manufactured					
Simple fertilisers					
Phosphatic					
Basic slag, ground	863.6	2,632	23	681.8(a)	1,473(a)
Phosphate rock, ground	97.4	583	28	96.9	447
Superphosphate of lime	362.4	2,402	40	607.3	2,807
Nitrogenous					
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen) (b)	713.2	9,238	9	662.1	6,835
Other nitrogenous fertilisers, excluding nitrate of ammonia (c)	285.6	3,679	10	211.0	2,420
				..	56
Other prepared or manufactured fertilisers					
Meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal	48.9	1,179	72	33.1	569
Other kinds	22.4	460	21	35.4	483
	..	43		..	21
Total simple fertilisers	2,393.5	20,174	..	2,327.7	15,033
	..	43		..	77

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TABLE 8 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Fertilisers, prepared or manufactured (contd.)					
Compound fertilisers	2,125.6	28,335	112	1,648.7	16,614
Disinfectants, antiseptics, insecticides, weed-killers, sheep and cattle dips and like products					
Coal tar disinfectants, antiseptics, and sheep and cattle dips and dressings	22.4	2,137	54	24.3	2,077
Other disinfectants and antiseptics	17.7	2,989	63	14.9	2,403
Other sheep and cattle dips and dressings	3.8	937	7	7.0	835
Agricultural and horticultural insecticides, fungicides and weedkillers	Th. cwts.			Th. cwts.	
Nicotine and insecticides containing nicotine	16.4	266	11	21.3	290
Weedkillers	Th. tons			Th. tons	
Other agricultural and horticultural insecticides and fungicides	21.9	2,328	51	12.1	935
Unclassified nicotine, etc. and other insecticides	40.8	4,294	48	16.1	1,529
Industrial and household insecticides, rodenticides, etc.	13.7	1,961	17	-	-
Insecticides, etc. not elsewhere specified	4.8	1,385	70	3.7	910
Waste products	0.9	146	28	5.5	422
Work done for the trade or on commission (d)	..	74	..	..	43
	..	45	14	..	27
	..	175	8	..	59
Total		65,777	..		43,630
Sales in other trades (see Table 9)		9,933	..		14,324
Principal products of this trade sold by establishments in the trade		55,843	162		29,307

(a) Corrected figure.  
 (b) Excluding output of sulphate of ammonia at coke ovens and gas works, which returned the following amounts:-

	1951		1948	
	Th. tons	£'000	Th. tons	£'000
Coke ovens	188.4	..	183.3	..
Gas works	79.7	1,171	69.0	806

(c) For ammonium nitrate see the Chemicals (General) Trade (Volume 2, Trade E).  
 (d) Amount charged.

Sales of principal products of the trade by establishments  
 classified to other trades (a)

Larger establishments

TABLE 9

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Fertilisers, prepared or manufactured					
Simple fertilisers					
Basic slag, ground	390.5	785	12	257.9(b)	375(b)
Superphosphate of lime and nitrogenous fertilisers other than nitrate of ammonia	74.6	908	11	594.6	6,303(c)
Other prepared or manufactured fertilisers					
Meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal	40.8	960	61	30.8	502
Other kinds	12.3	304	9	18.7	356
	..	11	..	..	21
Total simple fertilisers	518.2	2,958	..	902.1	7,536
	..	11	..	..	26

(86807/1)

TABLE 9 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Fertilisers, prepared or manufactured (contd.)					
Compound fertilisers	37.9	650	18	179.9	3,147
Disinfectants, antiseptics, insecticides, weed-killers, sheep and cattle dips and like products					
Coal tar disinfectants, antiseptics, and sheep and cattle dips and dressings	5.6	415	36	7.2	543
Other disinfectants, antiseptics, and sheep and cattle dips and dressings	2.2	341	41	2.5	289
Agricultural and horticultural insecticides, fungicides and weedkillers	..	385	..	..	230
Nicotine and insecticides containing nicotine	-	-	-	0.9	14
Weedkillers	13.4	1,804	29	8.4	591
Other agricultural and horticultural insecticides and fungicides	5.8	957	25	4.1	689
Unclassified nicotine, etc. and other insecticides	13.7	1,961	17	..	760
Industrial and household insecticides, rodenticides, etc.	1.0	346	43	1.5	294
Insecticides, etc. not elsewhere specified	0.3	81	17	0.6	32
	..	25	..	..	43
Work done for the trade or on commission					1(d)
Total		9,933	..		14,324

(a) Paragraph 3 of the introductory note on Page 1 should be read before making any comparisons between the figures for 1951 and 1948 in this table.  
 (b) Corrected figure.  
 (c) Including phosphate rock, ground.  
 (d) Amount charged.

Sales in the trade of other than principal products (a)

Larger establishments

TABLE 10

	United Kingdom 1951		Great Britain 1948	
	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000
Sulphuric acid, in terms of 100 per cent. acid	29.9	216	21.5	123
Drugs and pharmaceutical preparations	..	322	..	293
Other chemical manufactures	..	521	..	351
Animal oils, fats and greases	1.9	154	2.2	50
Soap	Th. cwts.		Th. cwts.	
Washing materials, soapless detergents and scouring materials, other than soap	16.7	64	13.4	67
Other goods	95.5	276	110.5	270
Work done	..	3,258	..	1,044
				24(b)
Total		4,811		2,223

(a) Paragraph 3 of the introductory note on page 1 should be read before making any comparisons between the figures for 1951 and 1948 in this table.  
 (b) Amount charged.

(86807/1)

## Production, exports and imports of certain principal products (a)

TABLE 11

		Production (b)	Exports (c)	Retained imports (d)
		Th. tons	Th. tons	Th. tons
Basic slag, ground	1951	870.0	..	155.5
	1948	685.8	2.0	76.7
Phosphate rock, ground	1951	583.8	..	7.5
	1948	707.7	..	136.3
Superphosphate of lime	1951	833.8	1.6	294.5
	1948	1,034.7	18.7	91.4
	1937	464.7	22.5	23.1
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen) (e)	1951	1,050.8	255.5	-
	1948	995.4	221.0	0.9
	1937	505.7(f)	311.8	-
Bone meal	1951	48.9(g)	..	13.7
	1948	33.1(g)	1.7	8.4
	1937	27.2(f)	2.1	14.8
Compound fertilisers	1951	2,125.6(h)	11.8	0.1
	1948	1,648.7(h)	7.1	0.1
	1937	577.5(f)	83.8	-
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and like products (i)		Th. cwts.	Th. cwts.	Th. cwts.
	1951	16.4(h)	4.8	1.2
	1948	21.3(h)	0.2	0.9
	1937	21.0(f)	1.2	0.5
		£'000	£'000	£'000
All other sorts	1951	16,739(h)	5,753	434
	1948	11,530(h)	3,992	131
	1937	2,061(f)	829	48

- (a) Figures of production (or sales) refer only to larger establishments in the United Kingdom (1951 and 1937) or Great Britain (1948). All recorded exports from and imports into the United Kingdom are given in the table. The figures, therefore, are not strictly comparable.
- (b) Including production (or sales) by establishments classified to other trades.
- (c) Valued f.o.b.
- (d) Valued c.i.f.
- (e) The overseas trade figures and the 1937 production figure are described simply as 'Sulphate of ammonia'.
- (f) Production for sale.
- (g) Sales, including meat meal, meat and bone meal, steamed bone flour and meal, and hoof and horn meal.
- (h) Sales.
- (i) The overseas trade figures relate to 'Disinfectants, insecticides, weedkillers, and sheep and cattle dressings'.

TABLE 12 - Usage of certain specified purchased materials, 1951  
Larger establishments in the United Kingdom

No information of usage of materials was required from this trade.

TABLE 13  
Employment in September  
Larger establishments (a)

	United Kingdom			Great Britain		United Kingdom	
	1951(b)	1950(b)	1949(b)	1949(b)	1948(c)	1937(c)	1935(c)
<b>(i) Operatives</b>							
Males							
Under 18	383	239	299	289	407	283	199
All ages	13,580	9,401	9,791	9,280	9,419	4,649	4,413
Females							
Under 18	215	142	217	217	262	108	68
All ages	1,643	1,636	1,841	1,830	1,896	510	465
Total							
Under 18	598	381	516	506	669	391	267
All ages	15,223	11,037	11,632	11,110	11,315	5,159	4,878

	United Kingdom			Great Britain		United Kingdom	
	1951	1950	1949	1949	1948	1937	1935
<b>(ii) Administrative, technical and clerical employees (d)</b>							
Males							
Under 18	96	81	100	96	93	88	71
All ages	3,651	2,649	2,646	2,586	2,475	1,312	1,246
Females							
Under 18	289	257	247	246	230	81	45
All ages	1,845	1,443	1,483	1,459	1,438	508	453
Total							
Under 18	385	338	347	342	323	169	116
All ages	5,496(e)	4,092(e)	4,129(e)	4,045(e)	3,913(e)	1,820	1,699

	United Kingdom			Great Britain		United Kingdom	
	1951	1950	1949	1949	1948	1937	1935
<b>(iii) Total employees</b>							
Males							
Under 18	479	320	399	385	500	371	270
All ages	17,231	12,050	12,437	11,866	11,894	5,961	5,659
Females							
Under 18	504	399	464	463	492	189	113
All ages	3,488	3,079	3,324	3,289	3,334	1,018	918
Total							
Under 18	983	719	863	848	992	560	383
All ages	20,719(e)	15,129(e)	15,761(e)	15,155(e)	15,228(e)	6,979	6,577

- (a) Excluded employees. The following persons were employed at the larger establishments in this trade in 1951 but are not included in the above tables or in any other Census of Production report (employees in Great Britain engaged, for example, in merchanting and in Northern Ireland canteen and welfare workers):-

Canteen workers 15 Males 145 Females  
Other workers 562 Males 198 Females

- (b) In week ended September 22, 1951, September 30, 1950, and September 24, 1949.
- (c) Average for the year.
- (d) In week ended September 22, 1951, September 30, 1950, September 24, 1949, September 25, 1948, October 16, 1937, and October 12, 1935.
- (e) Working proprietors. In addition working proprietors, shown in Table 13(iv) below, were engaged in this trade in larger establishments. The 1937 and 1935 figures include working proprietors.

	United Kingdom			Great Britain	
	1951	1950	1949	1949	1948
Males	22	24	26	24	25
Females	-	-	1	1	1
Total	22	24	27	25	26

Average employment

Larger establishments (a)

	Number						
	United Kingdom			Great Britain		United Kingdom	
	1951	1950	1949	1949	1948	1937	1935
Operatives	15,784	11,335	11,767	11,271	11,315	5,159	4,878
Administrative, technical and clerical employees	5,615	4,011	4,093	4,010	3,913(b)	1,820(b)	1,699(b)
Total	21,399	15,346	15,860	15,281	15,228	6,979	6,577

(a) For employment in small firms (employing on the average ten or fewer persons) that made satisfactory returns see Table 2.

(b) In week ended September 25, 1948, October 16, 1937, and October 12, 1935. The 1937 and 1935 figures include working proprietors.

Outworkers. In addition to the employees shown above the firms in this trade employed outworkers whose numbers are shown below.

	United Kingdom			Great Britain		United Kingdom	
	1951	1950	1949	1949	1948	1937	1935
Males	-	-	-	-	-	-	-
Females	9	8	-	-	-	-	-
Total	9	8	-	-	-	-	-

Shift working, 1951 (a)

Larger establishments in Great Britain

	Total number of man-shifts worked in the week	Total number of shift-hours worked in the week	Number of returns showing the systems stated
Continuous 3 shift systems per 24 hours averaging 8 hours per shift	17,874	142,993	30
Continuous 4 shift systems per 24 hours averaging 6 hours per shift	-	-	-
All 2 shift systems	2,889	27,623	20
Other shift systems	-	-	-
Total	20,763	170,616	(b)

(a) Shift working during week ended September 22, 1951.

(b) The number and percentage of returns showing shift working and of operatives on shift-work were as follows:-

	Returns		Operatives		
	Total in trade	Showing shift-work	Total in trade	Total on returns showing shift-work	Number employed on shift-work
Number	..	47	..	10,270	4,011
Percentage of total in trade	100.0	30.0(c)	100.0	70.0(c)	27.0(c)
Percentage of total on returns showing shift-work				100.0	39.1

(c) Rounded to avoid disclosure.

Wages and salaries and employers' National Insurance contributions paid during the year

Larger establishments

	£'000				
	United Kingdom			Great Britain	
	1951	1950	1949	1949	1948
Wages and salaries (a) of					
Operatives	5,971	3,717	3,670	3,515	3,374
Administrative, technical and clerical employees	3,045	1,955	1,910	1,880	1,676
Total	9,016	5,672	5,580	5,395	5,050
Employers' contributions to all National Insurance Schemes	212	151	155	150	106

(a) Including bonus and commission payments. Payments to outworkers in 1951 and 1950 amounted to less than £500; no outworkers were recorded for 1949 and 1948.

Plant, machinery and vehicles - acquisitions and disposals, and capital expenditure on new building work

Larger establishments

	United Kingdom		Great Britain	
	1951	1949	1949	1948
Plant, machinery and vehicles				
Acquisitions				
Plant and machinery				
New	2,511	698	680	549
Second-hand	28	42	42	24
Vehicles				
New	135	97	91	91
Second-hand	45	31	31	26
Total acquisitions	2,719	868	843	690
Disposals				
Plant and machinery	45	19	14	15
Vehicles	34	20	19	13
Total disposals	79	38	33	29
New building work				
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	646	444	443	149

**CHEMICALS AND ALLIED TRADES COUNTRY TABLES**  
**FERTILISER, DISINFECTANT, INSECTICIDE AND ALLIED TRADES**

1951

Summary

## Larger establishments

TABLE 18

	England(a)	Wales	Scotland	Great Britain	Northern Ireland(a)	United Kingdom
	£'000	£'000	£'000	£'000	£'000	£'000
Gross output (production)	49,678	972	10,686	..	..	61,336
Amount receivable in respect of						
General Charges Allowance	1,005	16	318	..	..	1,338
Government Early Delivery Rebate	121	2	29	..	..	152
Government Compound Rebate	114	3	18	..	..	135
Cost of materials and fuel used	31,405	565	7,661	..	..	39,631
Payment for work done on materials given out	138	-	-	..	..	138
Transport payments	2,302	51	444	..	..	2,797
Net output	17,073	377	2,946	..	..	20,395
Wages and salaries of persons employed	7,688	167	1,161	..	..	9,016
	No.	No.	No.	No.	No.	No.
Average number of persons employed (b)	17,960	417	3,044	..	..	21,421
	£	£	£	£	£	£
Net output per person employed (b)	951	903	968	..	..	952
Stocks at end of year	£'000	£'000	£'000	£'000	£'000	£'000
Products on hand for sale and work in progress	2,441	31	940	..	..	3,412
Materials and fuel	5,707	110	1,181	..	..	6,998
	No.	No.	No.	No.	No.	No.
Number of establishments	127	8	39	..	..	174

The values of gross output and of materials and fuel used are derived in the following way:-

	£'000	£'000	£'000	£'000	£'000	£'000
Output of firms in this trade						
Total value of sales (see Table 20)	49,416	968	10,270	..	..	60,654
Changes in stocks and work in progress (see Table 21)	+ 262	+ 3	+ 417	..	..	+ 682
Gross output (production)	49,678	972	10,686	..	..	61,336
Materials and fuel used by firms in this trade						
Purchases	33,731	594	8,019	..	..	42,343
Changes in stocks (see Table 21)	- 2,326	- 29	- 358	..	..	- 2,713
Materials and fuel used	31,405	565	7,661	..	..	39,631

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland, where net output was about 4.0 per cent. of that of the United Kingdom, cannot be given separately and have been included with those for England.

(b) Excluding outworkers but including working proprietors.

## Summary

## Small firms in Great Britain (a)

TABLE 19

	England	Wales	Scotland	Great Britain
Number of returns	161	2	28	191
Average number of persons employed (b)				
Males	782	7	166	955
Females	201	-	13	214
Total	983	7	179	1,169

(a) Small firms in Great Britain (employing on the average ten or fewer persons) that made satisfactory returns.

(b) Including working proprietors.



Sales in the trade  
Larger establishments

TABLE 20

	England and Wales		Scotland		Great Britain		Northern Ireland		United Kingdom	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Th. tons	£' 000	Th. tons	£' 000	Th. tons	£' 000		£' 000	Th. tons	£' 000
Principal products										
Fertilisers, prepared or manufactured										
Simple fertilisers										
Basic slag, ground	473.0	1,847	-	-	473.0	1,847	-	-	473.0	1,847
Phosphate rock, ground	60.4	353	..	(a)	..	..	..	(a)	97.4	583
Superphosphate of lime and nitrogenous fertilisers other than nitrate of ammonia	1,179.7	13,624	..	(a)	..	..	..	(a)	1,286.5	14,412
Other prepared or manufactured fertilisers										
Meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal	..	(a)	..	(a)	..	..	..	(a)	8.2	219
Other kinds	5.8	119	..	(a)	..	..	..	(a)	10.1	156
	..	31	..	(a)	..	..	..	(a)	..	31
Total simple fertilisers	1,750.7	16,317(b)	124.5	899	..	..	..	(b)	1,875.2	17,216
	..	31							..	31
Compound fertilisers	1,649.3	22,052(b)	438.4	5,634	..	..	..	(b)	2,087.7	27,685
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and like products										
Coal tar disinfectants, antiseptics, and sheep and cattle dips and dressings	..	(a)	..	(a)	16.8	1,722	-	-	16.8	1,722
Other disinfectants, antiseptics, and sheep and cattle dips and dressings	16.3	3,045	2.9	540	19.3	3,585	-	-	19.3	3,585
	..	48	..	56	..	104	-	-	..	104
Agricultural and horticultural insecticides, fungicides and weedkillers										
Nicotine and insecticides containing nicotine	..	(a)	..	(a)	16.4	266	-	-	16.4	266
					Th.cwts.				Th.cwts.	

TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain		Northern Ireland		United Kingdom	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000		£'000	Th. tons	£'000
Principal products (contd.)										
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and like products (contd.)										
Agricultural and horticultural insecticides, fungicides and weedkillers (contd.)										
Weedkillers	..	(a)	..	(a)	8.4	524	-	-	8.4	524
Other agricultural and horticultural insecticides and fungicides	..	(a)	..	(a)	35.0	3,337	-	-	35.0	3,337
Industrial and household insecticides, rodenticides, etc.	3.5	947	0.4	91	3.8	1,039	-	-	3.8	1,039
Insecticides, etc., not elsewhere specified	0.6	65	-	-	0.6	65	-	-	0.6	65
Waste products	..	45	-	-	..	45	-	-	..	45
Work done for the trade or on commission (c)		112		63		175		-		175
Total principal products		47,786 (b)		8,058		..		(b)		55,843
Other output										
Sulphuric acid, in terms of 100 per cent. acid	..	(a)	..	(a)	..	..	..	(a)	29.9	216
Drugs and pharmaceutical preparations	..	(a)	..	(a)	..	322	-	-	..	322
Other chemical manufactures	..	204	..	(a)	..	..	..	(a)	..	521
Animal oils, fats and greases	..	(a)	..	(a)	..	..	..	(a)	1.9	154
Soap	..	(a)	..	(a)	16.7	64	-	-	16.7	64
Washing materials, soapless detergents and scouring materials, other than soap	..	(a)	..	(a)	95.5	276	-	-	95.5	276
Other goods	..	1,339 (b)	..	1,919	..	..	..	(b)	..	3,258
Total		50,384 (b)		10,270		..		(b)		60,654

(a) Owing to the risk of disclosure of information relating to individual firms, separate particulars cannot be given.

(b) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

(c) Amount charged.

Stocks of products on hand for sale and work in progress,  
and stocks of materials and fuel

## Larger establishments

TABLE 21

£'000

		England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
Products on hand for sale	{ at beginning of year	2,071	488	..	..	2,559
	{ at end of year	2,323	907	..	..	3,230
Work in progress	{ at beginning of year	136	35	..	..	171
	{ at end of year	149	33	..	..	182
Total products on hand for sale and work in progress	{ at beginning of year	2,207	523	..	..	2,730
	{ at end of year	2,472	940	..	..	3,412
Materials and fuel	{ at beginning of year	3,462	823	..	..	4,285
	{ at end of year	5,817	1,181	..	..	6,998

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

## Employment in September

## Larger establishments (a)(b)

Note - Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales throughout this table.

TABLE 22

(i) Operatives

Number

	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males					
Under 18	344	39	..	..	383
All ages	11,844	1,736	..	..	13,580
Females					
Under 18	170	45	..	..	215
All ages	1,393	250	..	..	1,643
Total					
Under 18	514	84	..	..	598
All ages	13,237	1,986	..	..	15,223

(continued overleaf)

TABLE 22 (contd.)

(ii) Administrative, technical and clerical employees					Number
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males					
Under 18	62	34	..	..	96
All ages	3,068	583	..	..	3,651
Females					
Under 18	217	72	..	..	289
All ages	1,463	382	..	..	1,845
Total					
Under 18	279	106	..	..	385
All ages (c)	4,531	965	..	..	5,496

(iii) Total employees					Number
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males					
Under 18	406	73	..	..	479
All ages	14,912	2,319	..	..	17,231
Females					
Under 18	387	117	..	..	504
All ages	2,856	632	..	..	3,488
Total					
Under 18	793	190	..	..	983
All ages (c)	17,768	2,951	..	..	20,719

(a) Excluded employees. The number of persons employed at the larger establishments in this trade but not included in the above tables or in any other Census of Production report (employees in Great Britain engaged, for example, in merchanting and in Northern Ireland canteen and welfare workers) are shown in Table 22(v) below.

(b) Number employed in the week ended September 22, 1951.

(c) Working proprietors. In addition working proprietors, shown in Table 22(iv) below, were engaged in this trade in larger establishments.

(iv) Working proprietors					Number
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males	13	9	..	..	22
Females	-	-	-	-	-
Total	13	9	..	..	22

(v) Excluded employees					Number
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Canteen workers					
Males	14	1	15	-	15
Females	128	17	..	..	145
Total	142	18	..	..	160
Other workers'					
Males	286	276	..	..	562
Females	112	86	198	-	198
Total	398	362	..	..	760
Total excluded employees	540	380	..	..	920

## Average employment

## Larger establishments

TABLE 23					Number
	England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
Operatives	13,706	2,078	..	..	15,784
Administrative, technical and clerical employees	4,658	957	..	..	5,615
Total	18,364	3,035	..	..	21,399

Outworkers. In addition to the employees shown above the firms in this trade employed outworkers whose numbers are shown below.

	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males	-	-	-	-	-
Females	9	-	9	-	9
Total	9	-	9	-	9

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

## Wages and salaries and employers' National Insurance contributions paid during the year

## Larger establishments

TABLE 24					£'000
	England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
Wages and salaries (b) of					
Operatives	5,271	700	..	..	5,971
Administrative, technical and clerical employees	2,584	461	..	..	3,045
Total	7,855	1,161	..	..	9,016
Employers' contributions to all National Insurance Schemes	182	30	..	..	212

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

(b) Including bonus and commission payments but excluding payments to outworkers in England and Wales amounting to less than £500.

Plant, machinery and vehicles - acquisitions and disposals,  
and capital expenditure on new building work

## Larger establishments

	England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
Plant, machinery and vehicles					
Acquisitions					
Plant and machinery					
New	2,264	247	..	..	2,511
Second-hand	18	10	..	..	28
Vehicles					
New	108	27	..	..	135
Second-hand	41	4	..	..	45
Total acquisitions	2,431	289	..	..	2,719
Disposals					
Plant and machinery	32	13	..	..	45
Vehicles	24	10	..	..	34
Total disposals	56	23	..	..	79
New building work					
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	501	145	..	..	646

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

Payments for transport services for finished goods  
sold and materials and fuel purchased

## Larger establishments

	England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
Amounts paid to other firms and undertakings	2,300	357	..	..	2,657
Amount paid or credited to firms' own separate transport organisations	53	88	..	..	140
Total	2,353	444	..	..	2,797

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

The following brief notes refer to Great Britain and, unless otherwise stated, to the census of production for 1951. Reference should be made to the separate booklet in this series entitled 'The Report on the Census of Production for 1951: Introductory Notes' (price 1s. 6d. net) for particulars of the minor differences in the Northern Ireland censuses and other details about the census of production.

**Trade classification:** Establishments are classified to trades according to the nature of their output. Certain products, called principal products, are identified as characteristic of the production of individual trades, the principal products for a given trade being of a similar nature or commonly associated in production. An establishment is classified to a trade if its output of principal products of that trade accounted for a greater proportion of the value of its output than did its output of principal products of any other trade.

**The establishment:** The basic unit for the collection of information is generally the establishment which in most cases comprises the whole of the premises under the same ownership or management at a particular address (e.g., a factory). Offices, warehouses and other ancillary places of business situated apart from the producing works are included in the return for the works.

**Larger establishments and small firms:** Larger establishments are those which employed more than 10 persons on the average during the year; small firms are those employing on the average 10 or fewer persons.

**Working proprietors** are proprietors of businesses other than limited companies, and include members of their families who work in the business without receiving fixed wages or salaries. Any persons working less than half the normal hours are excluded.

**Persons employed:** Administrative employees include directors other than those paid by fee only, managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; and travellers and office (including works office) employees. Operatives include all other classes of employees, that is, broadly speaking, all manual workers.

All these figures exclude canteen employees and persons engaged in merchandising or any other activity not covered by a firm's return who are shown separately as excluded employees.

Figures for employees include only persons on the pay-roll (that is whose National Insurance cards were held by the firm), whether full-time or part-time employees.

**Outworkers,** who are shown separately, are persons employed by the firm who work on materials supplied by the firm, but do not work on the premises; operatives directly employed who work out of doors (e.g., maintenance workers) and sub-contractors are not included as outworkers.

**Wages and salaries** include all overtime payments, bonuses, and commissions, without any deduction for income tax, insurance, contributory pensions, etc. They exclude payments to working proprietors.

**Capital expenditure:** Expenditure on plant, machinery and vehicles relates to expenditure charged to capital account during the year of return, including transport and installation costs involved. Expenditure on new building work is similarly that charged to capital account during the year.

**Materials and fuel:** The cost of materials and fuel purchased includes all purchases during the year of materials for use in production and of fuel (including oil, gas, and electricity for all purposes, including heating and lighting); all packing materials, including the full cost of returnable containers when first purchased; workshop materials; office materials; water charges; materials for repairs to firms' own buildings, plant and vehicles when carried out by

their own work people included in the return; and consumable tools and parts for machinery purchased as replacement. Materials, components, etc. which were purchased and re-sold in the same state (that is, merchanted or factored goods) were excluded. For 1951 firms in many trades were required to state the quantities of certain purchased materials used.

**Stocks and work in progress:** Firms were instructed to give these at income tax value.

**Output:** Sales means sales during the year of goods made in the establishment covered by the return or made on commission for it, whether produced in the year or not. For all post-war censuses the value of sales was the net selling value, that is, the amount charged to customers, whether on an ex-works or delivered basis, and net of any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc. For goods charged on a delivered basis to customers overseas, firms were required to give the f.o.b. value.

**Gross output** of a trade is the total value of goods made and other work done during the year; this means the value of sales and work done during the year adjusted for changes in the values of stocks.

**Net output** is the amount left after deducting from the value of gross output the aggregate of the cost of materials and fuel used and the amount paid for work given out and, for 1951, any transport payments included in firms' returns. This represents the value added to materials by the process of production, and constitutes the fund from which wages, salaries, rents, rates and taxes, advertising and other selling expenses and all other similar charges have to be met as well as depreciation and profits.

**Customs and Excise Duty** paid on materials purchased is included in the cost of materials, but where it is especially important separate figures are shown.

**Later reports:** Reports will be published later summarising the main census results and giving information about power equipment and fuel consumption.

**Disclosure of information:** The report has been prepared in conformity with the disclosure provisions of the Statistics of Trade Act, 1947. Figures have been combined with others of a similar nature in certain cases where publication of separate details might disclose the operations of an individual firm.

**Symbols used:** '..' for 'Not available', '-' for 'Nil or negligible (less than half the final digit shown)'

The figures in the tables have been rounded off to the nearest final digit, and there may be an apparent slight discrepancy between the sums of the constituent items and the totals shown.

Tables 1 to 17 show figures for the United Kingdom (or Great Britain).

Tables 18 to 26 are country tables and give, where practicable, separate details for England and Wales, Scotland and Northern Ireland.

Table 6: Specialist producers refer to those establishments 50 per cent. or more of whose total output by value is accounted for by the groups of products specified.

Table 8 (or 8(i)) shows the total sales of principal products of the trade, and includes therefore the sales of these products returned by establishments whether classified to the trade or to other trades. Those produced by establishments in other trades are shown in Table 9.

Table 10 shows the sales by establishments in the trade of products other than those regarded as principal products of the trade.

Table 20 (or 20(i)) shows sales by establishments in the trade of products, whether principal products or not, and broadly the aggregates here are equal to the corresponding figures in Table 8 (or 8(i)) less those in Table 9, plus those in Table 10.

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