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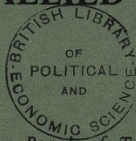
BOARD OF TRADE

FINAL REPORT  
on the  
CENSUS OF PRODUCTION  
FOR 1948

Volume 2

Trade C

FERTILISER, DISINFECTANT, INSECTICIDE  
AND ALLIED TRADES



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

LONDON : HER MAJESTY'S STATIONERY OFFICE

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THREE SHILLINGS NET

In interpreting the data in the following tables, it is essential to bear in mind not only the qualifications mentioned in this report but also the general explanations and qualifications contained in the separate booklet published in this series by H.M. Stationery Office entitled "Final Reports of the Census of Production for 1948: Introductory Notes", price 2s Od. NET

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\* Not applicable to this trade

#### 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 weed killers, including two Government establishments in 1948.

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

Establishments in these trades in Northern Ireland are excluded in 1948. Owing to the risk of disclosure of information relating to individual firms, separate particulars of the output in Northern Ireland were not published for 1935.

## FERTILISER, DISINFECTANT, INSECTICIDE AND ALLIED TRADES

## Summary

## Larger establishments

TABLE 1

	1948(a)	1937(b)	1935(b)
Gross output (production)	£'000 30,945	£'000 6,132	£'000 5,362
Amount receivable in respect of			
General Charges Allowances	2,011	-	-
Government Early Delivery Rebate	167	-	-
Government Compound Rebate	135	-	-
Cost of materials and fuel used	21,112	3,807	3,225
Payment for work done on materials given out	164	1	1
Amount payable in respect of levies	1,207	-	-
Net output	10,773	2,324	2,136
Wages and salaries of persons employed	5,050	..	..
Average number of persons employed	No. 15,254(c)	No. 6,979	No. 6,577
Net output per person employed	£ 706	£ 333	£ 325
Stocks at end of year	£'000	£'000	£'000
Finished products and work in progress	1,809	..	..
Materials and fuel	3,595	..	..
Number of establishments	No. 172	No. ..	No. 123

(a) Great Britain only.

(b) United Kingdom.

(c) For an estimate of the total number of persons employed in these trades see Table 3.

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

	1948	1937	1935
Output of firms in these trades	£'000	£'000	£'000
Total value of sales (1948) or production (1937 and 1935)			
Principal products (see Table 8)	29,307	5,587	4,966
Other output (see Table 10)	2,223	545	396
Adjustment for changes in stocks and work in progress (see Table 14)	+ 285		
Less payment for transport by other firms	31,814 870	6,132	5,362
Gross output (production)	30,945	6,132	5,362
Materials and fuel used by firms in these trades			
Purchases (see Table 13)	21,445(a)	3,807	3,225
Adjustment for changes in stocks (see Table 14)	- 333		
Materials and fuel used	21,112	3,807	3,225

(a) After deduction of Government refund in respect of price differences of sulphuric acid purchased (£2716,000).

## Summary, 1948

## Small firms in Great Britain

TABLE 2

Number of returns	165
Average number of persons employed (a)	
Males	771
Females	177
Total	948

(a) Including working proprietors.

## Estimated average employment, 1948

## All firms in Great Britain

TABLE 3

As returned by firms	
Employing on average more than ten persons (a)	15,254
Employing on average ten persons or less (b)	948
Estimated average employment in firms not making satisfactory returns	332
Estimated average employment in all firms	16,534

(a) See Tables 1 and 15.

(b) See Table 2.

## Analysis by size, 1948

## Larger establishments in Great Britain

TABLE 4

Average number employed	Establishments	Gross output	Net output	Persons employed	Remuneration			Net output per person employed
					Wages	Salaries	Total	
	No.	£'000	£'000	No.	£'000	£'000	£'000	£
11-24	49	1,548	552	855	178	97	275	645
25-49	49	3,580	1,259	1,761	337	241	578	715
50-99	27	3,893	1,500	1,899	423	184	607	790
100-199	26	7,879	2,487	3,740	855	386	1,241	865
200-299	13	6,272	2,435	3,285	680	427	1,107	746
300-399	5	3,471	1,173	1,657	391	188	559	708
400 and over	3	4,303	1,368	2,077	509	173	682	659
Total	172	30,945	10,773	15,254	3,374	1,876	5,050	706

TABLE 5

	Establishments	Gross output	Net output		Persons employed	Remuneration		
			Value	Percentage of total		Wages	Salaries	Total
	No.	£'000	£'000		No.	£'000	£'000	£'000
England								
Northern	14	3,729	1,238	11.5	1,759	463	120	583
East and West Ridings of Yorkshire	19	3,756	1,459	13.5	1,751	299	228	528
North Midland	19	3,202	1,048	9.7	1,517	352	200	552
Eastern	18	4,385	1,582	14.7	1,835	416	233	649
London and South Eastern	27	4,288	1,541	14.3	2,262	463	285	749
Southern; and South Western	10	2,010	611	5.7	732	184	73	257
Midland	7	295	99	0.9	181	37	22	59
North Western	21	2,924	1,028	9.5	1,740	361	184	544
Total England	135	24,588	8,605	79.9	11,777	2,576	1,345	3,921
Wales	6	615	261	2.4	376	102	22	125
Scotland	31	5,741	1,908	17.7	3,101	695	309	1,004
Great Britain	172	30,945	10,773	100.0	15,254	3,374	1,676	5,050

TABLE 6

	Establishments	Gross output	Sales of characteristic products	Net output	Persons employed	Remuneration			Net output per person employed
						Wages	Salaries	Total	
	No.	£'000	£'000	£'000	No.	£'000	£'000	£'000	£
Specialist producers of Fertilisers	114	21,078	16,395	6,475	10,061	2,558	862	3,420	643
Disinfectants, antiseptics, insecticides, weed killers, sheep and cattle dips and like products	49	8,676	7,691	3,726	4,361	714	663	1,377	854
Remainder of the trades	9	1,190		572	832	102	151	252	688
Total	172	30,945		10,773	15,254	3,374	1,676	5,050	706

Total make of intermediate products

Larger establishments

TABLE 7

	Returned in these trades						Returned in all trades		
	1948(a)		1937(b)	1935(b)		1948(a)		1935(b)	
	Quantity	Entries	Quantity		Quantity	Entries	Quantity		
	Th. tons	No.	Th. tons	Th. tons	Th. tons	No.	Th. tons		
Simple manures									
Basic slag, ground	427.9	12	...	217.0	1,001.6	30	320.0		
Phosphate rock, ground	706.9	33	..	..	707.7	34	..		
Superphosphate of lime	1,000.5	39	448.2	418.6	1,034.7	40	444.9		
Nitrogenous fertilisers									
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen)	305.1	6	..	4.5(c)	995.4	107	464.9(c)		
Other, including phosphate of ammonia and nitro-chalk but excluding nitrate of ammonia	15.8	10	..	11.2	233.3	14	91.5		

(a) Great Britain only.

(b) United Kingdom.

(c) Not described as being in terms of 20.6 per cent. nitrogen.

Sales (or production) of the principal products of these trades,  
including sales (or production) of these products by  
establishments classified to other trades

## Larger establishments

TABLE 8

	1948 (a) Sales			1937 (b) Production		1935 (b) Production	
	Quantity	Value	Entries	Quantity	Value	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000	Th. tons	£'000
Simple manures							
Basic slag, ground	997.6	1,670	30	409.6	497	319.8	399
Phosphate rock, ground	96.9	447	27	38.1	87	36.8	79
Superphosphate of lime	607.3	2,807	38	320.6	851	301.0	746
Nitrogenous fertilisers							
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen) (c)	662.1	6,835	13	228.0(d)	1,226	215.2(d)	1,014
Nitro-chalk	199.0	2,318	..				
Other nitrogenous fertilisers, including phosphate of ammonia but excluding nitrate of ammonia (e)	12.0 ..	102 56	13	105.8	537	90.7	409
Other manufactured fertilisers							
Meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal	33.1	569	51	27.2	143(f)	29.2	150(f)
Fish meal	5.4	135	7	1.0	6		
Guano	6.3	146	9	4.5	29	22.2	108
Other kinds	23.7 ..	202 21	35	19.7	100		
Total simple manures	2,643.5 ..	15,231 77	..	1,154.5	3,476	1,014.9	2,905

TABLE 8 (contd.)

	1948 (a) Sales			1937 (b) Production		1935 (b) Production	
	Quantity	Value	Entries	Quantity	Value	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000	Th. tons	£'000
Compound manures							
National (including National "Grow More")	833.8	7,138	59				
Concentrated	173.0	3,049	8	577.5	3,451	515.6	2,903
Other compound manures	641.9	6,427	70				
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and like products							
Coal tar disinfectants, antiseptics, and sheep and cattle dips and dressings	24.3	2,077	65				
Other disinfectants and antiseptics	14.9 ..	2,403 372	109	45.6 ..	1,377(g) 228		
Other sheep and cattle dips and dressings	7.0	835	14				
Industrial and household insecticides, rodenticides, etc.	3.7 ..	910 243	92				
Insecticides, etc., not elsewhere specified	5.5 ..	422 43	24				
Agricultural and horticultural insecticides, fungicides and weedkillers						51.7 Th. galls. 491	1,562 36
Agricultural and horticultural insecticides and fungicides other than nicotine and nicotine insecticides	16.1 ..	1,529 1,760	57	14.6	424		
Weedkillers	12.1	935	47	1.4	32		
Nicotine and insecticides containing nicotine	21.3	290	19	21.0	116	15.2	107

TABLE 8 (contd.)

	1948 (a) Sales			1937 (b) Production		1935 (b) Production	
	Quantity	Value	Entries	Quantity	Value	Quantity	Value
Waste products	..	£'000 27	No. 8	..	£'000 (h)	..	£'000 (h)
Work done for these trades or on commission		59(1)	9		(h)		(h)
Total		43,828	..		9,104		7,513
Less sales (or production) in other trades (see Table 9)		14,522	..		3,517		2,547
Total principal products of these trades sold or made by establishments in these trades		29,307	164		5,587		4,966

(a) Great Britain only.

(b) United Kingdom.

(c) Excluding output of coke ovens and gas works which returned the following amounts:-

	1948		1937		1935	
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Coke ovens	183.3	2,013	193.9	982	160.9	805
Gas works	69.0	806	83.8	439	75.1	392

(d) Not described as being in terms of 20.6 per cent. nitrogen.

(e) For ammonium nitrate see the Chemicals (General) Trade (Volume 2, Trade E).

(f) Bone meal.

(g) Including 12,800 tons (£367,000) of sheep and cattle dressings.

(h) Not recorded separately.

(i) Amount charged.

Sales (or production) of principal products of these trades by establishments classified to other trades

TABLE 9

	1948 (a) Sales			1937 (b) Production		1935 (b) Production	
	Quantity	Value	Entries	Quantity	Value	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000	Th. tons	£'000
Simple manures							
Basic slag, ground	573.7	573	18	123.0	100	103.0	92
Phosphate rock, ground; superphosphate of lime; and nitrogenous fertilisers other than nitrate of ammonia	594.6	6,303	12	341.1	1,756	318.6	1,431
	..	5					
Other manufactured fertilisers							
Meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal	30.8	502	38	24.3	125	26.5	132
Fish meal and guano	10.0	238	11	2.0	13	17.5	46
Other kinds	8.7	118	29	10.9	63		
	..	21					
Total simple manures	1,217.9	7,734	..	501.3	2,057	465.6	1,701
	..	26					
Compound manures							
Concentrated	164.3	2,984	..	83.2	684	53.7	416
Other compound manures (except National)	15.8	183	8				
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and like products							
Coal tar disinfectants and antiseptics, and sheep and cattle dips and dressings of all kinds	7.2	543	48	10.2	430(c)	228	
Other disinfectants and antiseptics	2.5	289	85				
	..	230					
Industrial and household insecticides, rodenticides, etc.	1.5	294	65				
	..	128					
Insecticides, etc., not elsewhere specified	0.6	32	12				
	..	43					

TABLE 9 (contd.)

	1948 (a) Sales			1937 (b) Production		1935 (b) Production	
	Quantity	Value	Entries	Quantity	Value	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000	Th. tons	£'000
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and like products (contd.)						12.3 Th. galls. 480	382 34
Agricultural and horticultural insecticides, fungicides and weedkillers				1.2	89		
Agricultural and horticultural insecticides and fungicides other than nicotine and nicotine insecticides	4.1 ..	689 760	28				
Weedkillers	8.4 Th. cwts.	591	26	0.1 Th. cwts.	4		
Nicotine and insecticides containing nicotine	0.9	14	6	1.9	25	1.6 Th. cwts.	14
Work done for these trades or on commission		1(d)	..		-		-
<b>Total</b>		14,522	..		3,517		2,547

(a) Great Britain only.

(b) United Kingdom.

(c) Including 1,100 tons (£42,000) of sheep and cattle dressings.

(d) Amount charged.

## Sales (or production) in these trades of other than principal products

## Larger establishments

TABLE 10

	1948 (a) Sales		1937 (b) Production		1935 (b) Production	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Sulphuric acid, in terms of 100 per cent. acid (c)	21.5	123	21.6	59	18.0	50
Coal tar products	..	119	..	71	..	8
Drugs and pharmaceutical preparations	..	293	..	5	..	4
Other chemical manufactures	..	232	..	51	..	47
Animal oils, fats and greases	2.2 Th. cwts.	50	1.8 Th. cwts.	37	1.4 Th. cwts.	27
Soap	13.4	67	40.1	45	40.6	44
Washing materials, soapless detergents and scouring materials, other than soap	110.5 Th. tons	270	-	-	4.3 Th. tons	3
Feeding stuffs for animals, poultry, etc.	4.5 ..	103 21	15.7	147	10.3	89
Other goods	..	920	..	130	..	123
Work done (d)		24		-		1
<b>Total</b>		2,223		545		396

(a) Great Britain only.

(b) United Kingdom.

(c) The total make of sulphuric acid recorded on schedules for the Fertilizer, Disinfectant, Insecticide and Allied Trades was 169,900 tons in 1948, 149,900 tons in 1937 and 121,500 tons in 1935.

(d) Amount charged in 1948 and amount received in 1937 and 1935.

## Analysis of sales, 1948

## Larger establishments in Great Britain

TABLE 11

	Sales	Percentage of total sales
	£'000	
Sales (or transfers) to other organisations under the same control		
Productive works	1,156	3.7
Export sales organisations (including branches abroad)	1,662	5.3
Other wholesale or selling organisations; and retail shops, etc.	7,957	25.3
Total sales (or transfers) to other organisations under the same control	10,775	34.3
Sales to independent buyers		
Exports invoiced directly overseas	914	2.9
Exports invoiced to Crown Agents and purchasing houses in this country of individual firms and governments abroad	230	0.7
His Majesty's Government and Local Authorities (other than productive establishments)	868	2.8
Manufacturers, repairers, builders, mines, public utilities, and transport and other productive undertakings	954	3.0
Wholesalers, merchants and other agents for resale	9,256(a)	29.4
Retailers, including multiple shops, caterers and N. A. A. F. I., for resale	1,951	6.2
Other businesses, (including farmers) and institutions of all kinds	6,447	20.5
Members of the public, including employees	54	0.2
Total sales to independent buyers	20,673	65.7
Total	31,447	100.0

(a) Of this total £5,585,000 was recorded as divided between £598,000 for export and £4,987,000 for other sales.

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

TABLE 12

		Production (b)	Exports (c)	Retained imports (d)
		Th. tons	Th. tons	Th. tons
Basic slag, ground	1948	1,001.6	2.0	76.7
Phosphate rock, ground	1948	707.7	..	136.3
Superphosphate of lime	{ 1948 1937	{ 1,034.7 464.7(e)	{ 18.7 22.5	{ 91.4 23.1
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen) (f)	{ 1948 1937	{ 995.4 505.7(g)	{ 221.0 311.8	{ 0.9 -
Bone meal	{ 1948 1937	{ 33.1(h) 27.2(i)	{ 1.7 2.1	{ 8.4 14.8
Compound manures	{ 1948 1937	{ 1,648.7(j) 577.5(i)	{ 7.1 83.8	{ 0.1 -
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and like products (k)		Th. cwts.	Th. cwts.	Th. cwts.
Nicotine and insecticides containing nicotine	{ 1948 1937	{ 21.3(j) 21.0(i) £'000	{ 0.2 1.2 £'000	{ 0.9 0.5 £'000
All other sorts	{ 1948 1937	{ 11,530(j) 2,061(i)	{ 3,992 829	{ 131 48

(a) Figures of sales (or production) refer only to larger establishments in Great Britain (1948) or the United Kingdom (1937). All recorded exports from and imports into the United Kingdom are given in the table. The figures, therefore, are not strictly comparable.

(b) Including sales (or production) by establishments classified to other trades.

(c) Valued f.o.b.

(d) Valued c.i.f.

(e) Including 16,500 tons returned in other trades.

(f) The overseas trade figures and 1937 production figures are not described as being in terms of 20.6 per cent. nitrogen.

(g) Production for sale. Including the output (277,700 tons) of coke ovens and gas works.

(h) Sales of meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal.

(i) Production for sale.

(j) Sales.

(k) The overseas trade figures relate to "Disinfectants, insecticides, weedkillers and sheep and cattle dressings."



## Purchased materials and fuel

## Larger establishments

TABLE 13

	1948 (a)		1937 (b)		1935 (b)	
	Materials and fuel purchased		Usage of purchased materials and fuel			
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Materials						
Pyrites	91.4	185	104.2	125	102.4	122
Sulphuric acid, in terms of 100 per cent. acid	246.5	777(c)	43.5	83	39.1(d)	72
Phosphate rock (mineral phosphates of lime)						
Ground	19.4	92	339.0	579	313.4	461
Unground	743.6	1,508				
Potassium salts						
Chloride (muriate)	193.9	1,813	69.8	404	64.5	314
Nitrate	0.2	4				
Sulphate	10.5	182				
Other	21.1	174				
Nitrogenous fertilisers						
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen)	369.7	3,309	83.2(d)	507	72.8(d)	438
Nitro-chalk	1.1	11	23.9	106	..	(e)
Nitrolim (calcium cyanamide)	0.1	2				
Nitrate of ammonia	1.7	21				
Phosphate of ammonia	0.1	4				
Other	24.7	161	15.3	46	..	(e)
Sulphur	13.9	118				
Spent oxide	17.1	18				
Superphosphate of lime	246.8	1,148	66.1	169	..	(e)
Bones and bone pieces, raw and degreased, including horns and hoofs	5.6	82	16.3	79		
Packing materials	Thous.					
Jute sacks and bags	30,938	1,806	..	400	..	
Other packing materials	..	417				
	..	1,781				

TABLE 13 (contd.)

	1948 (a)		1937 (b)		1935 (b)	
	Materials and fuel purchased		Usage of purchased materials and fuel			
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Materials (contd.)						
Ammonia liquor (in terms of 880 ammonia)	62.9	489				
Nitric acid, in terms of 100 per cent. acid	1.5	32				
Basic slag						
Ground	5.0	11				
Unground	400.0	353				
Lime	23.5	47				
Meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal	14.1	260				
Fish meal	2.7	46				
Guano	0.9	13				
China clay	3.5	24				
Filling materials (e.g., cocoa shell, peat, hops)	118.2	287	..	(e)	..	(e)
Arsenic compounds	Th. cwts.					
White arsenic	37.9	69				
Other	3.6	16				
Benzene hexachloride	33.9	336				
Casein	14.7	15				
Caustic soda (on basis of 76°E.)	15.8	14				
..	..	12				
Copper sulphate	71.2	95				
Cresols	40.7	152				
Creosote oils (including cresylic creosote)	Th. galls.					
3,531	3,531	192				
Cresylic acid, refined	526	114				
Th. cwts.	Th. cwts.					
Dichloro-diphenyl-trichloroethane (D.D.T.)	14.5	237				

TABLE 13 (contd.)

	1948 (a)		1937 (b)		1935 (b)	
	Materials and fuel purchased		Usage of purchased materials and fuel			
	Quantity	Cost	Quantity	Cost	Quantity	Cost
Materials (contd.)	Th. galls.	£'000	Th. tons	£'000	Th. tons	£'000
Mineral oils (other than for fuel)	1,957	119				
Vegetable oils	Th. cwts. 46.1	317				
Nicotine	0.9	72				
Pyrethrum flowers	0.6 ..	4 8	..	1,179	..	1,722(f)
Soda ash (on basis of 58°)	40.6	20				
All other purchased materials	..	3,373				
Fuel and electricity	Th. tons					
Coal	175.3	477	40.8	45	40.4	40
Coke	15.7	53	..	(e)	6.7	6
Electricity purchased	Th. B. T. U. (kW.hrs.)		Th. B. T. U. (kW.hrs.)		Th. B. T. U. (kW.hrs.)	
Electricity obtained from other works under the same ownership	{ 148,819 ..	{ 428 61	{ 20,824	58	{ 16,210	50
Motor spirit (petrol) and deriv. fuel	Th. galls.					
Used for road vehicles	{ 365 ..	{ 35 4				
Used for other power purposes	{ 131 ..	{ 11 3				
Other oil fuel (including creosote/pitch mixtures)	374	14	..	27	..	(e)
Gas purchased	Th. therms. 233 ..	7 3				
Gas obtained from other works under the same ownership	-	-				
All other purchased fuel	..	2				
Total		21,445		3,807		3,225

- (a) Great Britain only.  
(b) United Kingdom.  
(c) Net cost after deducting the amount of the Government refund in respect of price differences (£716,000).  
(d) Not specified in the terms stated.  
(e) Not recorded separately.  
(f) Including fuel not specified separately.

Stocks of finished products and work in progress and stocks of materials and fuel, 1948

Larger establishments in Great Britain

TABLE 14

	At beginning of year		At end of year	
	Quantity	Value	Quantity	Value
Finished products	Th. tons	£'000	Th. tons	£'000
Superphosphate of lime	64.6	231	60.2	172
Compound manures	96.1	630	116.2	777
Other finished products	..	544	..	711
Work in progress		119		149
Total finished products and work in progress		1,524		1,809
Materials and fuel				
Phosphate rock	64.9	135	63.4	132
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen)	24.4	222	16.3	151
Other descriptions of materials and fuel	..	2,904	..	3,311
Total materials and fuel		3,261		3,595

CHEMICALS AND ALLIED TRADES  
Employment and remuneration (a)  
Larger establishments  
(i) Private firms

TABLE 15

	Average number of operatives			Administrative, technical and clerical employees (b)			Total		
	1948(c)	1937(d)	1935(d)	1948(c)	1937(d)	1935(d)	1948(c)	1937(d)	1935(d)
Males									
Under 18	376	283	199	92	88	71	468	371	270
All ages	8,416	4,649	4,413	2,364	1,312	1,246	10,800	5,961	5,659
Females									
Under 18	261	108	68	225	81	45	486	189	113
All ages	1,854	510	465	1,386	508	453	3,240	1,018	918
Total									
Under 18	637	391	267	317	169	116	954	560	383
All ages	10,270	5,159	4,878	3,770(e)	1,820	1,699	14,040 (e) (f) (g)	6,979	6,577
Total remuneration	£'000			£'000			£'000		
	3,042	..	..	1,599	..	..	4,641	..	..

(a) Excluded employees. The following numbers were employed at establishments in these trades but are not included in the table or in any other report (e.g., employees in a separate selling or transport organisation for which separate accounts are kept):-

Canteen workers	7 males	105 females
Other workers	147 males	34 females

(b) Number at September 25, 1948, October 16, 1937, and October 12, 1935.

(c) Great Britain only.

(d) United Kingdom.

(e) There were, in addition 26 working proprietors (25 males and 1 female) in 1948. Working proprietors are included in the 1937 and 1935 figures.

(f) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to £96,000.

(g) The following persons (included in this total) were employed on special work by establishments employing 100 or more persons:-

	Operatives	Administrative, technical and clerical employees
Transport of goods outside the premises	81	
Maintenance and repair of firms' buildings, but not plant	96	
Research work not directly connected with current production however charged	1	82

FERTILISER, DISINFECTANT, INSECTICIDE AND ALLIED TRADES  
Employment and remuneration (a)  
Larger establishments  
(ii) Government Departments

TABLE 15

	Average number of operatives	Administrative, technical and clerical employees (b)	Total
	1948	1948	1948
Males			
Under 18	31	1	32
All ages	1,003	91	1,094
Females			
Under 18	1	5	6
All ages	42	52	94
Total			
Under 18	32	6	38
All ages	1,045	143	1,188(c) (d)
Total remuneration	£'000	£'000	£'000
	331	77	408

(a) Excluded employees. No persons were recorded as being employed at Government establishments in these trades but not included in the table or in any other report (e.g., employees in a separate selling or transport organisation for which separate accounts are kept).

(b) Number at September 25, 1948.

(c) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to £10,000.

(d) The following persons (included in this total) were employed on special work by establishments employing 100 or more persons:-

	Operatives	Administrative, technical and clerical employees
Transport of goods outside the premises	-	
Maintenance and repair of firms' buildings, but not plant	4	
Research work not directly connected with current production however charged	-	-

Wages and salaries paid, 1948 (a)  
Larger establishments in Great Britain

TABLE 16

	Amount paid by all establishments	Amount paid	Establishments making returns for the calendar year				
			Percentage of annual remuneration paid in				
			First quarter	Second quarter	Third quarter	Fourth quarter	Year
Wages and salaries of	£'000	£'000					
Operatives	3,374	928	24.8	25.7	25.2	24.3	100.0
Administrative, technical and clerical employees	1,676	643	23.2	24.3	25.2	27.3	100.0
Total	5,050	1,570	24.2	25.1	25.2	25.6	100.0

(a) Including bonus and commission payments.

TABLE 17 - Payments for work done on materials given out, 1948

Larger establishments in Great Britain

The total amount paid for work done on materials given out was £164,000.

Payments for certain services, 1948  
Larger establishments in Great Britain

TABLE 18

	Amount paid
	£'000
Repair and maintenance	
Of buildings	73
Of plant, machinery and vehicles	194
Unclassified	104
Hire of plant, machinery and vehicles	56
Advertising and market research	
Advertising in newspapers, magazines and periodicals	135
Other advertising services (poster display, despatch of circulars, etc.) and market research	64
Unclassified	227
Payments made for research work	
To research associations	3
To universities, institutions, academic bodies and similar agencies	3
To other commercial concerns	4
Postage, telephone, telegrams and cables	79
Commercial insurance premiums	93
Rates (excluding water rates) payable in the year	44

Plant, machinery and vehicles acquired and disposed of, 1948

Larger establishments in Great Britain

TABLE 19

	Acquisitions		Disposals
	New	Second-hand	
	£'000	£'000	£'000
Plant and machinery	549	24	15
Vehicles	91	26	13
Total	640	50	29

Capital expenditure on building work and changes in  
occupation of buildings and land, 1948

Larger establishments in Great Britain

TABLE 20

	£'000	£'000
1. Capital expenditure on building work (a)		149
2. Existing buildings and land (b)		
(1) Capital cost of freeholds bought	60	
Estimated capital value of		
(1i) Rented property newly occupied in the year (c)	54	
(1ii) Leasehold buildings and land newly occupied in the year	165	
Total of heading 2		280
Total of headings 1 and 2		430
3. Existing buildings and land relinquished (d)		
(1) Selling value of freeholds sold	9	
(1i) Estimated value of other properties relinquished	12	
Total of heading 3		21
4. Headings 1 and 2 less heading 3		409

- (a) Excluding site value which, where appropriate, is included in heading 2(1).  
 (b) The figures do not reflect changes in ownership of previously occupied land and buildings.  
 (c) Property which is occupied under an agreement for the payment of rent without the purchase of a lease or the payment of a premium.  
 (d) Including property destroyed or abandoned.

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

1948

## Summary

## Larger establishments

TABLE 21

	England	Wales	Scotland	Great Britain
	£'000	£'000	£'000	£'000
Gross output (production)	24,588	615	5,741	30,945
Amount receivable in respect of				
General Charges Allowances	1,455	67	489	2,011
Government Early Delivery Rebate	113	2	52	167
Government Compound Rebate	102	4	30	135
Cost of materials and fuel used	16,612	388	4,112	21,112
Payment for work done on materials given out	164	-	-	164
Amount payable in respect of levies	877	39	292	1,207
Net output	8,605	261	1,908	10,773
Wages and salaries of persons employed	3,921	125	1,004	5,050
Average number of persons employed	No. 11,777	No. 376	No. 3,101	No. 15,254
Net output per person employed	£ 731	£ 694	£ 615	£ 706
Stocks at end of year	£'000	£'000	£'000	£'000
Finished products and work in progress	1,375	13	421	1,809
Materials and fuel	3,068	61	465	3,595
Number of establishments	No. 135	No. 6	No. 31	No. 172

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

	England	Wales	Scotland	Great Britain
	£'000	£'000	£'000	£'000
Output of firms in these trades				
Total value of sales (see Table 23)	25,262	649	5,618	31,530
Adjustment for changes in stocks and work in progress	+ 117	- 5	+ 172	+ 285
	25,380	644	5,790	31,814
Less payment for transport by other firms	791	30	49	870
Gross output (production)	24,588	615	5,741	30,945
Materials and fuel used by firms in these trades				
Purchases (see Table 24) (a)	16,959	410	4,076	21,445
Adjustment for changes in stocks	- 347	- 22	+ 36	- 333
Materials and fuel used	16,612	388	4,112	21,112

(a) After deduction of Government refund in respect of price differences of sulphuric acid purchased, £718,000 for Great Britain. (Owing to the risk of disclosure of information relating to individual firms, separate figures by countries cannot be given).

## Summary

## Small firms

TABLE 22

	England	Wales	Scotland	Great Britain
Number of returns	138	5	22	165
Average number of persons employed (a)				
Males	654	22	95	771
Females	155	2	20	177
Total	809	24	115	948

(a) Including working proprietors.

Sales in these trades  
Larger establishments

TABLE 23

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Principal products						
Simple manures						
Basic slag, ground	423.9	1,097	-	-	423.9	1,097
Phosphate rock, ground; superphosphate of lime; and nitrogenous fertilisers other than nitrate of ammonia	793.7 ..	5,349 51	189.0	858	982.7 ..	6,207 51
Other manufactured fertilisers						
Meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal	1.6	52	0.7	15	2.3	67
Fish meal and guano	..	(a)	..	(a)	1.7	43
Other kinds	..	(a)	..	(a)	15.0	83
Total simple manures	1,235.1 ..	6,605 51	190.5	892	1,425.6 ..	7,497 51
Compound manures						
National (including National "Grow More")	..	(a)	..	(a)	833.8	7,138
Concentrated	..	(a)	..	(a)	8.7	84
Other compound manures	478.2	4,914	148.2	1,330	626.3	6,244
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and dressings						
Coal tar disinfectants and antiseptics, and sheep and cattle dips and dressings of all kinds	..	(a)	..	(a)	24.1	2,370
Other disinfectants and antiseptics	..	(a)	..	(a)	12.4 ..	2,115 142
Industrial and household insecticides, rodenticides, etc.	..	(a)	..	(a)	2.2 ..	615 115
Insecticides, etc., not elsewhere specified	..	(a)	..	(a)	5.0	390

TABLE 23 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
		£'000		£'000	Th. tons	£'000
Principal products (contd.)						
Disinfectants, antiseptics, insecticides, weedkillers, sheep and cattle dips and dressings (contd.)						
Agricultural and horticultural insecticides, fungicides and weedkillers						
Agricultural and horticultural insecticides and fungicides other than nicotine and nicotine insecticides	..	(a)	..	(a)	12.0 ..	840 1,000
Weedkillers	..	(a)	..	(a)	3.8 Th. cwt.	344
Nicotine and insecticides containing nicotine	..	(a)	..	(a)	20.4	276
Waste products	..	27	..	1	..	27
Work done for these trades or on commission (b)		58		-		58
Total principal products		24,043		5,263		29,307
Other output						
Sulphuric acid, in terms of 100 per cent. acid	..	(a)	..	(a)	21.5	123
Coal tar products	..	(a)	..	(a)	..	119
Drugs and pharmaceutical preparations	..	293	-	-	..	293
Other chemical manufactures	..	(a)	..	(a)	..	232
Animal oils, fats and greases	..	(a)	..	(a)	2.2	50
Soap	..	(a)	..	(a)	13.4	67
Washing materials, soapless detergents and scouring materials, other than soap	..	(a)	..	(a)	110.5 Th. tons	270
Feeding stuffs for animals, poultry, etc.	..	(a)	..	(a)	4.5 ..	103 21
Other goods	..	881	..	39	..	920
Work done (b)		24		-		24
Total		25,912		5,618		31,530

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

(b) Amount charged.

## Purchased materials and fuel

## Larger establishments

TABLE 24

	England and Wales		Scotland		Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Materials						
Pyrites	..	(a)	..	(a)	91.4	185
Sulphuric acid, in terms of 100 per cent. acid (b)	..	(a)	..	(a)	246.5	777
Phosphate rock (mineral phosphates of lime)						
Ground	5.9	31	13.5	61	19.4	92
Unground	499.9	1,023	243.6	485	743.6	1,508
Potassium salts						
Chloride (muriate)	150.1	1,403	43.8	411	193.9	1,813
Nitrate	0.2	4	-	-	0.2	4
Sulphate	9.5	164	1.0	18	10.5	182
Other	..	(a)	..	(a)	21.1	174
Nitrogenous fertilisers						
Sulphate of ammonia (in terms of 20.6 per cent. nitrogen)	286.1	2,526	83.5	782	369.7	3,309
Nitro-chalk					1.1	11
Nitrolim (calcium cyanamide)	..	(a)	..	(a)	0.1	2
Nitrate of ammonia					1.7	21
Phosphate of ammonia	0.1	4	-	-	0.1	4
Other	..	(a)	..	(a)	24.7	161
Sulphur	7.3	68	6.6	50	13.9	118
Spent oxide	..	(a)	..	(a)	17.1	18
Superphosphate of lime	175.3	808	71.5	340	246.8	1,148
Bones and bone pieces, raw and degreased, including horns and hoofs	..	(a)	..	(a)	5.6	82
Packing materials	Thous.		Thous.		Thous.	
Jute sacks and bags	24,274	1,321	8,664	485	30,938	1,806
	..	342	..	75	..	417
Other packing materials	..	1,628	..	153	..	1,781
Ammonia liquor (in terms of 880 ammonia)	Th. tons		Th. tons		Th. tons	
	62.4	484	0.4	4	62.9	489
Nitric acid, in terms of 100 per cent. acid	1.5	32	-	-	1.5	32

TABLE 24 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Materials (contd.)						
Basic slag						
Ground	..	(a)	..	(a)	5.0	11
Unground	400.0	353	-	-	400.0	353
Lime	..	(a)	..	(a)	23.5	47
Meat meal, meat and bone meal, bone meal, steamed bone flour and meal, and hoof and horn meal	12.4	226	1.7	34	14.1	260
Fish meal	..	(a)	..	(a)	2.7	46
Guano	0.9	13	-	-	0.9	13
China clay	3.5	24	-	-	3.5	24
Filling materials (e.g., cocoa shell, peat, hops)	109.2	277	9.1	11	118.2	287
Arsenic compounds	Th. cwts.		Th. cwts.		Th. cwts.	
White arsenic	..	(a)	..	(a)	37.9	69
Other	3.6	16	-	-	3.6	16
Benzene hexachloride	..	(a)	..	(a)	33.9	336
Casein	..	(a)	..	(a)	14.7	15
Caustic soda (on basis of 76° E.)	12.4	11	3.4	3	15.8	14
	..	12			..	12
Copper sulphate	71.2	95	-	-	71.2	95
Cresols					40.7	152
Creosote oils (including cresylic creosote)					Th. galls.	
					3,531	192
Cresylic acid, refined					528	114
Dichloro-diphenyl-trichloroethane (D.D.T.)	..	(a)	..	(a)	Th. cwts.	
					14.5	237
Mineral oils (other than for fuel)					Th. galls.	
					1,957	119
Vegetable oils					Th. cwts.	
					46.1	317
Nicotine	0.9	72	-	-	0.9	72
Pyrethrum flowers	0.6	4	-	-	0.6	4
	..	8			..	8
Soda ash (on basis of 58°)	37.4	18	3.2	1	40.6	20
All other purchased materials	..	3,068	..	305	..	3,373

TABLE 24 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
Fuel and electricity	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Coal	153.0	412	22.3	65	175.3	477
Coke	8.4	30	7.3	23	15.7	53
	Th. B. T. U. (kW. hrs.)		Th. B. T. U. (kW. hrs.)		Th. B. T. U. (kW. hrs.)	
Electricity purchased						
Electricity obtained from other works under the same ownership	140,496	395	8,324	34	148,819	428
	..	58	..	3	..	61
Motor spirit (petrol) and derv. fuel	Th. galls.		Th. galls.		Th. galls.	
Used for road vehicles	271	26	94	9	365	35
	..	4	..	..	..	4
Used for other power purposes	111	9	20	2	131	11
	..	3	..	..	..	3
Other oil fuel (including creosote/pitch mixtures)	..	(a)	..	(a)	374	14
	Th. therms		Th. therms		Th. therms	
Gas purchased	205	6	28	1	233	7
	..	3	..	..	..	3
Gas obtained from other works under the same ownership	-	-	-	-	-	-
All other purchased fuel	..	2	-	-	..	2
Total		17,369		4,076		21,445

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

(b) Net cost after deducting the amount of the Government refund in respect of price differences (£716,000 for Great Britain).

## Employment and remuneration

## Larger establishments

## (i) Private firms

TABLE 25

	England and Wales			Scotland			Great Britain		
	Average number of operatives	Admin-istrative, technical and clerical employees (a)	Total	Average number of operatives	Admin-istrative, technical and clerical employees (a)	Total	Average number of operatives	Admin-istrative, technical and clerical employees (a)	Total
Males									
Under 18	340	51	391	36	41	77	376	92	468
All ages	6,386	1,868	8,254	2,030	516	2,546	8,416	2,384	10,800
Females									
Under 18	230	194	424	31	31	62	261	225	486
All ages	1,604	1,095	2,699	250	291	541	1,854	1,386	3,240
Total									
Under 18	570	245	815	67	72	139	637	317	954
All ages	7,990	2,963 (b)	10,953 (b) (c)	2,280	807 (b)	3,087 (b) (c)	10,270	3,770 (b)	14,040 (b) (c)
Total remuneration	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
	2,347	1,290	3,637	695	309	1,004	3,042	1,599	4,641

(a) Number at September 25, 1948.

(b) There were, in addition, 26 working proprietors (25 males and 1 female) in Great Britain; 11 males, 1 female in England and Wales and 14 males in Scotland.

(c) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to a total of £96,000; £73,000 for England and Wales, and £23,000 for Scotland.

## (ii) Government Departments

The Government establishments classified to this trade were situated in England and Wales. Particulars of employment and remuneration therein are given in Table 15(ii).



Monthly index of employment of operatives: Larger establishments  
(average employment in 1948 = 100)

TABLE 26

Month	Monthly index (a)			Month	Monthly index (a)		
	England and Wales	Scotland	Great Britain		England and Wales	Scotland	Great Britain
1948				1948			
January	100.5	105.9	100.8	August	98.8	96.3	98.6
February	101.0	110.7	101.7	September	98.4	98.5	98.4
March	103.4	111.6	104.0	October	96.9	98.5	97.0
April	103.1	105.9	103.3	November	97.2	92.8	96.9
May	102.1	103.7	102.2	December	96.6	90.2	96.1
June	101.5	93.7	101.0	Percentage employment in these trades covered by index	35.3	10.0	30.2
July	100.6	92.0	100.0				

(a) The index numbers are calculated from the number of operatives employed in one week in each month returned by larger establishments that made returns for the calendar year 1948.

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