

30 Pharmaceutical chemicals and preparations

This Report on the Pharmaceutical Chemicals and Preparations Industry relates to establishments wholly or mainly engaged in manufacturing products for therapeutic and prophylactic use (including veterinary) and chemicals for compounding into such products, including the same chemicals when used subsequently as additives to foods and drinks.

This industry corresponds to minimum list heading 272 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 corresponds to the Pharmaceutical Preparations Industry (Part 28) (except for surgical and medical dressings etc not wholly of cotton and surgical sutures) in the Reports on the last detailed Census of Production for 1963 but also includes pharmaceutical chemicals which were part of the General Chemicals Industry (Part 27) and medicines, spices and condiments specifically for animals, poultry etc included in the Animal and Poultry Foods Industry (Part 15). Surgical and medical dressings etc not wholly of cotton and surgical sutures form part of the Report on Surgical Bandages, etc (Part 42) for 1968.

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.

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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(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) Administrative, technical and clerical employees.

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

(f) Acquisitions less disposals.

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

| | Unit | All establishments | |
|---|-------|--|---------|
| | | 1963 | 1968 |
| Number of enterprises | No. | 306 | 283 |
| Number of establishments | " | 359 | 336 |
| Gross output | £'000 | 237,221 | 347,243 |
| Net output | " | 136,674 | 195,603 |
| Net output per head | £ | 2,263 | 3,497 |
| Sales and work done | £'000 | 215,233 | 320,470 |
| | | { goods produced and work done (c) | |
| | | { merchant goods and canteen takings | |
| Net amounts received in respect of Customs and Excise rebate and drawback on alcohol, etc | " | 19,694 | 21,586 |
| | | { materials for use in production and packaging and fuel | |
| Purchases | " | 87,737 | 136,359 |
| | | { goods for merchanting and canteen purchases | |
| | | { for work done on materials given out for transport | |
| Payments to other organisations | " | 1,051 | 2,137 |
| | | { by road | |
| | | { by rail and other means excluding postal services | |
| | | 2,682 | 2,176 |
| | | | 527 |
| Stocks and work in progress | | | |
| Total stocks and work in progress | " | + 3,966 | + 6,885 |
| | " | 51,548 | 73,480 |
| | " | - 97 | + 1,700 |
| Goods on hand for sale | " | 17,763 | 24,789 |
| | " | + 2,390 | + 3,486 |
| Work in progress | " | 15,460 | 23,591 |
| | " | + 1,673 | + 1,699 |
| Materials, stores and fuel | " | 18,326 | 25,101 |
| | " | 60.4 | 55.9 |
| Number employed on average during the year | Th. | 33.0 | 29.9 |
| | " | 27.2 | 25.9 |
| | " | 17,798 | 24,421 |
| Wages and salaries | £'000 | 26,524 | 34,533 |
| | " | 9,210 | 16,889 |
| Capital expenditure (e) | " | 3,602 | 5,185 |
| Total | " | - 225 | + 89 |
| New building work | " | 5,122 | 10,910 |
| Land and existing buildings (f) | " | 710 | 704 |
| Plant and machinery (f) | " | | |
| Vehicles (f) | " | | |

(a) For 1968, estimates for establishments not making satisfactory returns and for small establishments, from which only employment data were collected, accounted for 5 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 3 per cent. and 1 per cent. respectively.

(b) 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 | 182 | 178 |
| Average number employed: | | |
| Working proprietors | 214 | 165 |
| Other persons employed | 1,434 | 1,469 |

Footnotes continued on page 30/2.

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 |
|---|------------------|------------------|--|--------------|------------|---------------------|
| | Number | Number | Number | £'000 | £'000 | £ |
| 1-5 | 73 | 73 | 206 | .. | .. | .. |
| 6-10 | 31 | 31 | 235 | .. | .. | .. |
| 11-24 | 58 | 57 | 1,098 | .. | .. | .. |
| 25-49 | 23 | 23 | 823 | 5,408 | 2,606 | 3,166 |
| 50-99 | 32 | 26 | 2,182 | 10,114 | 5,717 | 2,620 |
| 100-199 | 31 | 30 | 4,827 | 24,840 | 13,136 | 2,721 |
| 200-299 | 15 | 15 | 3,702 | 26,156 | 11,297 | 3,052 |
| 300-399 | 9 | 8 | 3,124 | 20,548 | 12,417 | 3,975 |
| 400-499 | 6 | 6 | 2,676 | 16,267 | 9,086 | 3,395 |
| 500-749 | 11 | 10 | 6,785 | 49,018 | 25,187 | 3,712 |
| 750-1,499 | 16 | 14 | 16,853 | 107,431 | 64,100 | 3,803 |
| 1,500 and over | 5 | 5 | 12,246 | 70,437 | 42,488 | 3,470 |
| Unsatisfactory returns | 26 | 25 | 1,180 | .. | .. | .. |
| Total | 336 | 283 | 55,937 | 347,243(c) | 195,603(c) | 3,497(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 | 513 | 296 | 352 | 351 | 686 | 1,185 |
| 50-99 | 1,398 | 774 | 910 | 921 | 651 | 1,190 |
| 100-199 | 2,889 | 1,934 | 1,941 | 2,621 | 672 | 1,355 |
| 200-299 | 2,288 | 1,414 | 1,758 | 1,934 | 768 | 1,368 |
| 300-399 | 1,444 | 1,680 | 1,043 | 2,233 | 722 | 1,329 |
| 400-499 | 1,634 | 1,042 | 1,128 | 1,356 | 691 | 1,301 |
| 500-749 | 3,592 | 3,193 | 2,877 | 4,366 | 801 | 1,367 |
| 750-1,499 | 8,743 | 8,110 | 8,024 | 10,758 | 918 | 1,327 |
| 1,500 and over | 5,996 | 6,250 | 5,289 | 8,395 | 882 | 1,343 |
| Unsatisfactory returns | .. | .. | .. | .. | .. | .. |
| Total | 29,855(c) | 25,887(c) | 24,421(c) | 34,533(c) | 818(c) | 1,334(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 | 3 | 4 |
| 18 and over | 54 | 42 | 96 |
| All ages | 55 | 45 | 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) Some establishments employing fewer than 25 persons were included in returns for larger establishments. These amounted to 2 establishments in 1968 and 9 in 1963.
- (b) 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).
- (c) Direct sales of goods (excluding canteen takings) made to, and work done for, the general public by larger establishments are included. These amounted to £283,000 in 1968. Similar information is not available for 1963.
- (d) This is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.
- (e) The total Customs and Excise duty paid was £1,575,000 for 1963 and £1,890,000 for 1968.
- (f) Administrative, technical and clerical employees.
- (g) 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)

| | Unit | 1963 | 1968 | |
|---|---|---------|---------|---------|
| Number of enterprises | No. | 129 | 103 | |
| Number of establishments | " | 182 | 150 | |
| Gross output | £'000 | 229,617 | 330,644 | |
| Net output | " | 132,294 | 186,253 | |
| Net output per head | £ | 2,263 | 3,497 | |
| Sales and work done | { goods produced and work done (b)(c) | £'000 | 208,335 | 305,151 |
| | { merchanted goods and canteen takings | " | 19,063 | 20,554 |
| Index of specialisation (d) | Per cent. | 86 | 88 | |
| Net amounts received in respect of Customs and Excise rebate and drawback on alcohol, etc (e) | £'000 | 3,289 | 4,880 | |
| Purchases | { materials for use in production and packaging, and fuel | £'000 | 84,925 | 129,841 |
| | { goods for merchenting and canteen purchases | " | 13,694 | 16,439 |
| Payments to other organisations | { for work done on materials given out | " | 1,017 | 2,035 |
| | { for transport | " | 2,596 | 502 |
| | { by road | " | | |
| | { by rail and other means excluding postal services | " | | |
| Stocks and work in progress | | | | |
| Goods on hand for sale | { change during year | " | - 94 | + 1,619 |
| | { at end of year | " | 17,193 | 23,604 |
| Work in progress | { change during year | " | + 2,313 | + 3,319 |
| | { at end of year | " | 14,964 | 22,463 |
| Materials, stores and fuel | { change during year | " | + 1,619 | + 1,618 |
| | { at end of year | " | 17,738 | 23,901 |
| Number employed on average during the year | { total, including working proprietors | No. | 58,466 | 53,263 |
| | { operatives | " | 32,015 | 28,525 |
| | { other employees (f) | " | 26,425 | 24,708 |
| Wages and salaries | { of operatives | £'000 | 17,302 | 23,345 |
| | { of other employees (f) | " | 25,770 | 32,962 |
| Wages and salaries per head | { operatives | £ | 540 | 818 |
| | { other employees (f) | " | 975 | 1,334 |
| Capital expenditure (g) | | | | |
| New building work | £'000 | 3,487 | 4,938 | |
| Land and existing buildings | { acquisitions | " | 90 | 243 |
| | { disposals | " | 307 | 158 |
| Plant and machinery | { acquisitions | " | 5,186 | 10,616 |
| | { disposals | " | 228 | 227 |
| Vehicles | { acquisitions | " | 1,394 | 1,226 |
| | { disposals | " | 707 | 555 |

For notes to this table - see page 30/5.

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

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

| | 1963 | 1968 | | |
|--|-------|--------|--------------|---------|
| | Value | Value | Enter-prises | Entries |
| | £'000 | £'000 | Number | Number |
| Pharmaceutical chemicals for therapeutic or prophylactic (including veterinary) use, unmixed and un compounded, including organo-therapeutic extracts of glands, etc but excluding products put up in measured doses | | | | |
| Anti-infective agents | | | | |
| Antibiotics (not in prepared form) | | | | |
| Penicillin and synthetic penicillin derivatives | | 4,446 | 7 | 9 |
| Streptomycin and dihydrostreptomycin | | 1,297 | * | * |
| Other | | 7,155 | 12 | 18 |
| Sulphonamides | | 1,924 | 8 | 10 |
| Other anti-infective agents | | 5,568 | 12 | 14 |
| Hormones (excluding insulin) | | 3,542 | 12 | 13 |
| Insulin | | 381 | * | * |
| Vitamins, provitamins, their salts and esters | | 5,324 | 10 | 13 |
| Other pharmaceutical chemicals affecting metabolism and nutrition | | 427 | 11 | 11 |
| Acetylsalicylic acid | | 1,295 | * | * |
| Alkaloids, their salts and their derivatives | | | | |
| Morphine, codeine, ethylmorphine and other derivatives of morphine | | 2,067 | 4 | 5 |
| Other alkaloids | | 1,050 | 8 | 10 |
| Barbiturates and other pharmaceutical chemicals acting on the nervous system | | 5,048 | 18 | 20 |
| Pharmaceutical chemicals acting on the respiratory system | | 331 | 7 | 7 |
| Antihistamines | | 537 | 11 | 11 |
| Pharmaceutical chemicals acting on the alimentary system | | 422 | 8 | 12 |
| Saccharin (including substances of a like nature or use, but excluding cyclamates) | | 1,554 | 7 | 7 |
| Other pharmaceutical chemicals | | 18,255 | 38 | 52 |
| Total of pharmaceutical chemicals | | 60,624 | .. | .. |
| Pharmaceutical preparations, mixed or compounded in all forms, and, unmixed put up in prepared forms or measured doses, for therapeutic or prophylactic (including veterinary) use | | | | |
| Anti-infective agents | | | | |
| Antibiotics | | | | |
| Penicillin and synthetic penicillin derivatives | | | | |
| Tablets | | 5,332 | 16 | 20 |
| Injectable | | 3,591 | 10 | 13 |
| Syrups | | 3,747 | 12 | 14 |
| Topical | | 87 | 11 | 13 |

Continued on next page.

TABLE 5 (continued)

| | 1963 | 1968 | | |
|---|---------|-------|--------------|---------|
| | Value | Value | Enter-prises | Entries |
| | £'000 | £'000 | Number | Number |
| Pharmaceutical preparations, mixed or compounded in all forms, and unmixed put up in prepared forms or measured doses, for therapeutic or prophylactic (including veterinary) use (continued) | | | | |
| Anti-infective agents (continued) | | | | |
| Antibiotics (continued) | | | | |
| Tetracyclines | | | | |
| Tablets | | 6,353 | 17 | 18 |
| Injectable | | 301 | 5 | 5 |
| Syrups and topical | | 2,004 | 8 | 10 |
| Feeding stuff additives | | 623 | 7 | 9 |
| Other antibiotics | | | | |
| Tablets | | 2,218 | 19 | 22 |
| Injectable | | 3,835 | 17 | 18 |
| Topical | | 2,712 | 18 | 20 |
| Other | | 3,247 | 20 | 22 |
| Sulphonamides | | | | |
| Topical | | 310 | 17 | 17 |
| Oral | | 1,561 | 27 | 28 |
| Vaccines (and sera) | | | | |
| Human | | | | |
| Antibacterial | | 754 | * | * |
| Antiviral | | 1,888 | 6 | 7 |
| Veterinary | | 2,992 | 5 | 7 |
| Other anti-infective agents | | | | |
| Antibacterials | | | | |
| Feeding stuff additives | | 1,474 | 5 | 5 |
| Other | | 1,667 | 12 | 12 |
| Antipaludic | | 1,439 | 6 | 6 |
| Anthelmintic | | 2,630 | 23 | 26 |
| Other | | 4,747 | 20 | 21 |
| Hormone preparations | | | | |
| Corticosteroids | | | | |
| Systemic | | 3,077 | 24 | 25 |
| Topical | | 8,003 | 24 | 26 |
| Oral contraceptives | | 1,596 | 8 | 9 |
| Other hormones (excluding insulin) | | 2,409 | 23 | 23 |
| Preparations affecting metabolism and nutrition | | | | |
| Vitamin preparations (excluding animal feed stuff additives containing vitamins) | 189,822 | | | |
| | (a) | 6,926 | 44 | 49 |
| Iron preparations | | 3,881 | 35 | 39 |
| Insulin | | 1,312 | * | * |
| Other | | 3,579 | 22 | 25 |

TABLE 5 (continued)

| | 1963 | 1968 | | |
|---|-------|--------|--------------|---------|
| | Value | Value | Enter-prises | Entries |
| | £'000 | £'000 | Number | Number |
| Pharmaceutical preparations, mixed or compounded in all forms, and unmixed put up in prepared forms or measured doses, for therapeutic or prophylactic (including veterinary) use (continued) | | | | |
| Preparations affecting the nervous system | | | | |
| Aspirin | | 6,460 | 31 | 35 |
| Aspirin compounds | | 6,864 | 35 | 38 |
| Other analgesics | | 7,120 | 53 | 60 |
| Tranquillisers | | 11,587 | 27 | 28 |
| Hypnotics | | | | |
| Barbiturate | | 1,831 | 26 | 28 |
| Other | | 2,446 | 13 | 13 |
| Anti-depressives | | 3,780 | 22 | 24 |
| Anaesthetics | | 4,433 | 14 | 17 |
| Other | | 2,082 | 27 | 30 |
| Preparations affecting the cardiovascular system, and diuretics | | | | |
| Anti-hypertensives | | 8,414 | 21 | 21 |
| Diuretics | | 2,104 | 20 | 22 |
| Other | | 3,864 | 24 | 25 |
| Antiemetics and antiallergics | | 3,103 | 21 | 21 |
| Preparations affecting the alimentary system | | | | |
| Antacids | | 5,640 | 43 | 49 |
| Salines | | 898 | 18 | 18 |
| Laxatives | | 3,964 | 47 | 50 |
| Anti-haemorrhoids | | 1,632 | 25 | 27 |
| Other | | 2,662 | 38 | 39 |
| Preparations affecting the respiratory system | | | | |
| Cough medicines | | 6,328 | 62 | 67 |
| Bronchial and asthma remedies | | 4,207 | 43 | 47 |
| Other | | 2,856 | 35 | 38 |
| Topical preparations, not elsewhere specified | | 5,999 | 55 | 66 |
| Confectionery, medicated | | 6,521 | 34 | 40 |
| Malt extract and malt mixtures (with cod liver oil or halibut liver oil, etc) | | | | |
| For medicinal use | | 144 | 11 | 11 |
| Other | | 1,391 | 6 | 6 |
| Dietary supplements | | 2,199 | 17 | 19 |
| Patent and proprietary foods and food drinks (including infants' and invalids' food) medicinal | | | | |
| Milk based | | 2,137 | 7 | 7 |
| Other | | 1,184 | 8 | 9 |
| Medicinal oils not included elsewhere | | 697 | 17 | 19 |

Continued on next page.

TABLE 5 (continued)

| | 1963 | | 1968 | |
|---|---------|---------|--------------|---------|
| | Value | Value | Enter-prises | Entries |
| | £'000 | £'000 | Number | Number |
| Pharmaceutical preparations, mixed or compounded in all forms, and unmixed put up in prepared forms or measured doses, for therapeutic or prophylactic (including veterinary) use (continued) | | | | |
| Mineral additives for foods and feeding stuffs (eg calcium, phosphates) | | 658 | 11 | 11 |
| Pharmaceutical additives for foods and feeding stuffs (eg vitamins) whether or not compounded with mineral additives (eg calcium, phosphates), but excluding antibiotics and mixtures containing antibiotics and other antibacterials | | 2,935 | 18 | 21 |
| Medicines, spices and condiments specifically for animals, poultry, etc, not elsewhere specified | | 1,645 | 26 | 29 |
| Antiseptics | | 4,223 | 32 | 38 |
| Other pharmaceutical preparations | | 15,023 | 66 | 77 |
| Other products | 2,694 | 2,423 | 23 | 25 |
| Waste products | 75 | 119 | 17 | 22 |
| Work done | 2,298 | 920 | 24 | 25 |
| Total | 194,889 | 285,412 | .. | .. |
| Sales in other industries (see Table 6) | 15,035 | 17,529 | .. | .. |
| Principal products of this industry sold by establishments in the industry | 179,854 | 267,883 | 103 | 123(b) |

(a) Owing to the differences in the detail collected for 1963 and 1968 it is not possible to obtain a great degree of comparability at commodity level. The information for 1963 is made up as follows:-

| | Value £'000 |
|--|----------------|
| PHARMACEUTICAL CHEMICALS (chemicals for therapeutic or prophylactic (including veterinary) use, unmixed and uncompounded, including organo-therapeutic extracts of glands, etc, steroids, etc and vaccines, etc, in all forms but excluding other products put up in measured doses) | |
| Antibiotics: | |
| Penicillin, its salts and derivatives | 2,355 |
| Streptomycin and dihydrostreptomycin (in terms of base) | 606 |
| Other antibiotics | 2,374 |
| Steroid preparations (cortisone, hydrocortisone, etc), hormones and similar products having analogous physiological properties not elsewhere specified (all forms including sales in compounded forms or measured doses) | 9,077 |
| Sulphonamides (other than tablets) | 1,630 |
| Acetylsalicylic acid (aspirin, other than aspirin tablets) and salicylates | 1,778 |
| Alkaloids, their salts and other derivatives | |
| Morphine, codeine, ethylmorphine and other derivatives of morphine | 1,572 |
| Other alkaloids | 749 |
| Organo-inorganic compounds for medicinal uses, not elsewhere specified | 387 |
| Anaesthetics, general and local, not elsewhere specified (other than compressed gases) | 3,350 |
| Barbituric acid, its salts and derivatives | 603 |
| Insulin (all forms and solutions, including sales in measured doses) | 1,344 |
| Other organo-therapeutic extracts of glands or other organs or of their secretions (all forms including sales in measured doses) | 786 |
| Saccharin, including substances of a like nature or use (other than saccharin tablets) | 457 |
| Vaccines, sera and other serological products (all forms including sales in measured doses) | |
| Vaccines, sera and other serological products (all forms including sales in measured doses) | 5,144 |
| Vitamins, provitamins, etc their salts and esters | 2,703 |
| Other pharmaceutical chemicals, not elsewhere specified | 9,906 |
| Unclassified pharmaceutical chemicals | 345 |
| Total pharmaceutical chemicals | 45,165 |

Footnotes to Table 5 (continued).

PHARMACEUTICAL PREPARATIONS, mixed or compounded in all forms, and unmixed put up in prepared forms or measured doses, for therapeutic or prophylactic (including veterinary) use

| | Value £'000 |
|--|----------------|
| Preparations put up for injection | |
| Penicillin | 2,003 |
| Other antibiotics | 1,740 |
| Other (excluding steroid preparations, etc organo-therapeutic extracts of glands, etc and vaccines, etc) | 5,388 |
| Tablets, pills, lozenges, capsules, etc and powders put up in prepared forms or doses (excluding health salts and salines, medicated confectionery and chemical and mineral additives for foods) | 12,994 |
| Aspirin and aspirin compounds | 1,679 |
| Alkaloids (morphine, codeine, etc and derivatives) | |
| Antibiotics | |
| Penicillin | 5,423 |
| Other | 11,066 |
| Barbiturates | 1,981 |
| Sulphonamides | 1,578 |
| Vitamins | 3,761 |
| Other | 34,614 |
| Ointments, lotions, liniments and liquid dressings of like use put up in prepared forms (excluding general purpose disinfectants and preparations for pest and plant control) | |
| Antiseptic preparations specifically for medicinal use (including gargles, mouth washes, etc) | 3,323 |
| Antibiotics | |
| Penicillin | 205 |
| Other | 2,227 |
| Other (including insect-repellent ointments and dressings, anti-sunburn lotion, etc) | 4,556 |
| Liquid and emulsion preparations, syrups and elixirs specifically for medicinal use put up in prepared forms or doses (excluding lotions, liniments, dressings etc) | 15,875 |
| Galencials not put up in prepared forms or doses (including bulk sales for blending, compounding or bottling, etc) | 3,044 |
| Confectionery, medicated (including that containing therapeutic doses and the like) | 4,813 |
| Health salts and salines | 1,166 |
| Malt extract and malt mixtures for medicinal use (with cod liver oil or halibut liver oil, etc) | 1,646 |
| Medicated and tonic wines | 348 |
| Patent and proprietary foods and food drinks including infants' and invalids' food, medicinal | 3,330 |
| Medicinal oils not included elsewhere | 512 |
| Chemical and mineral additives and supplements for foods and feeding stuffs (including animal) | |
| Vitamins, phosphates, calciums, etc | 6,327 |
| Antibiotics (including mixtures containing antibiotics) | 1,488 |
| Medicines, spices and condiments specifically for animals, poultry, etc not elsewhere specified | 4,595 |
| Other pharmaceutical preparations | 8,974 |
| Total pharmaceutical chemicals and preparations | 189,822 |

(b) The figure represents the total number of returns made by larger firms in this industry which is less than the total number of establishments in Table 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

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

| | 1963 | 1968 | | |
|---|---------------|--------|---------|--|
| | Value | Value | Entries | Principal industries in which produced (a) |
| | £'000 | £'000 | Number | |
| Pharmaceutical chemicals for therapeutic or prophylactic (including veterinary) use, unmixed and uncompounded, including organo-therapeutic extracts of glands, etc but excluding products put up in prepared doses | 15,035 (b) | 5,308 | 38 | 18, 28, 29, 35 |
| Pharmaceutical preparations, mixed or compounded in all forms, and unmixed put up in prepared forms or measured doses, for therapeutic or prophylactic (including veterinary) use | | | | |
| Preparations affecting the nervous system | | | | |
| Aspirin and aspirin compounds | | 2,504 | 8 | 11, 28, 31, 33 |
| Other analgesics | | 70 | * | 31, 42 |
| Other (excluding hypnotics and anti-depressives) | | 449 | * | 35, 42 |
| Preparations affecting the alimentary system | | | | |
| Antacids | | 348 | 5 | 11, 31, 33, 42 |
| Other | | 962 | 10 | 11, 29, 31 |
| Preparations affecting the respiratory system | | | | |
| Cough medicines | | 419 | 8 | 18, 31, 33, 108 |
| Other | | 556 | 7 | 31, 33, 42 |
| Topical preparations, not elsewhere specified | | 1,012 | 15 | 11, 38, 40, 42 |
| Confectionery, medicated | | 2,174 | 24 | 11, 13, 31 |
| Mineral additives for foods and feeding stuffs (eg calcium, phosphates) | | 220 | 5 | 7, 8, 15 |
| Pharmaceutical additives for foods and feeding stuffs (eg vitamins) whether or not compounded with mineral additives (eg calcium, phosphates), but excluding antibiotics and mixtures containing antibiotics and other antibacterials | | 27 | * | 15 |
| Medicines, spices and condiments specifically for animals, poultry, etc, not elsewhere specified | | 748 | 9 | 33, 35, 40 |
| Antiseptics | | 1,372 | 7 | 31, 35, 42 |
| Other pharmaceutical preparations | | 1,358 | 21 | 19, 31, 33, 149 |
| Total | 15,035 | 17,529 | .. | |

For notes to this table - see page 30/13.

Footnotes to Table 6.

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

(b) Owing to the differences in the detail collected for 1963 and 1968 it is not possible to obtain a great degree of comparability at commodity level. The information for 1963 is made up as follows:-

| | Value £'000 |
|--|----------------|
| PHARMACEUTICAL CHEMICALS (chemicals for therapeutic or prophylactic (including veterinary) use, unmixed and uncompounded, including organo-therapeutic extracts of glands, etc, steroids, etc, and vaccines, etc in all forms but excluding other products put up in measured doses) | 5,273 |
| PHARMACEUTICAL PREPARATIONS mixed or compounded in all forms and unmixed put up in prepared forms or measured doses, for therapeutic or prophylactic (including veterinary) use. | |
| Tablets, pills, lozenges, capsules, etc and powders put up in prepared forms or doses (excluding health salts and salines, medicated confectionery and chemical and mineral additives for food) | 3,016 |
| Ointments, lotions, liniments, and liquid dressings of like use put up in prepared forms (excluding general purpose disinfectants and preparations for pest and plant control) | 794 |
| Malt extract and malt mixtures for medicinal use (with cod liver oil or halibut liver oil, etc) and patent and proprietary foods and food drinks including infants' and invalids' food, medicinal | 801 |
| Other pharmaceutical preparations | 5,151 |
| Total | 15,035 |

TABLE 7 Sales of other than principal products by larger establishments in the industry, 1963 and 1968

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

| | 1963 | 1968 |
|---|----------------|----------------|
| | Value £'000 | Value £'000 |
| Sugar confectionery | 7,075 | 911 |
| Food products | | 246 |
| General chemicals (inorganic) | 4,523 | 1,443 |
| General chemicals (organic) | | 2,416 |
| Miscellaneous general chemicals | | |
| Chemicals put up or prepared for laboratory use | | 2,958 |
| Other miscellaneous chemicals | | 3,121 |
| Toilet preparations | | |
| Hair preparations (excluding soaps and soap shampoos) | | |
| Other than for hair waving | | |
| Hair dressings, hair tonics and conditioners | | |
| Specifically for men | 2,631 | 232 |
| Other | | 417 |
| Hair settings, lotions and spirits | | 942 |
| Soapless shampoos | | 1,451 |
| Other hair preparations, including dyes, bleaching and toning preparations | | 841 |
| Preparations for hair waving | | 547 |
| Other toilet preparations and cosmetics (excluding soaps and dental preparations) | | |
| Manicure preparations | 4,446 | 132 |
| Talcum and toilet powders (excluding face powder) | | 533 |
| Face creams (excluding ointments) | | 854 |
| Hand creams, jellies and tablets | | 385 |
| Face and skin lotions (including face packs, pre-shave and after shave lotions) | | 873 |
| Bath preparations | | 1,864 |
| Deodorants, anti-perspirants, depilatories | | 918 |
| Other, including make-ups | 1,141 | |
| Perfumes and toilet waters | | 262 |
| Dental preparations | | |
| Toothpaste | 993 | 1,009 |
| Cleansing preparations including tooth powder | | 348 |
| Soap and detergent | | |
| Toilet soap in tablet form (78/80 per cent. fatty acid) | 416 | 157 |
| Shaving soap, solid, cream or powder | | 59 |
| Brushless shaving cream | | 81 |
| Other soaps, including shampoos, liquid and soft soap (but excluding hard soap, powder, flakes and chips) | | 101 |
| Compounded materials primarily for washing purposes (ie finished detergents) | | 1,167 |

TABLE 7 (continued)

| | 1963 | 1968 |
|---|----------------|----------------|
| | Value £'000 | Value £'000 |
| Pesticides and disinfectants | | |
| Disinfectants | 4,478 | 1,998 |
| Formulated pesticides | | |
| Sheep and cattle dips and dressings and seed dressings | | 143 |
| Insecticides | | 629 |
| Fungicides | | |
| Organic compounds | | 534 |
| Inorganic compounds | | 94 |
| Rodenticides | | 32 |
| Other preparations for pest and plant control | | 3,090 |
| Household deodorisers | 2,837 | 167 |
| Surgical dressings | | 1,403 |
| Other goods | | 2,457 |
| Services rendered to other organisations (a) | 1,082 | 1,314 |
| Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored) | 18,253 | 19,653 |
| Canteen takings | 810 | 901 |
| Total | 47,544 | 57,823 |

(a) 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 selected principal products of the industry, 1968

This table is not applicable to this industry.

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 | | £'000 | | £'000 |
| Precipitated chalk, talc, magnesium carbonate and other powder bases | .. | (a) | .. | 482 |
| Aromatic raw materials | | | | |
| Essential oils (natural, other than turpentine) | .. | 21(b) | .. | 493 |
| Compound oils (perfumery bases) | .. | (a) | .. | 317 |
| Floral concretes and absolutes | .. | (a) | .. | 29 |
| Perfumery chemicals, synthetic | .. | (a) | .. | 408 |
| Natural waxes | .. | (a) | .. | 174 |
| Synthetic waxes (and mixed waxes) | .. | (a) | .. | 96 |
| Milk and milk powder | .. | 259 | .. | 198 |
| Malt | .. | 208 | .. | 431 |
| Glucose, lactose and other sweetening agents (excluding saccharin and cyclamates) | .. | 2,014 | .. | 2,623 |
| Corn-steep liquor | .. | (a) | .. | 237 |
| Vegetable and animal oils and fats | .. | 14(b) | .. | 1,374 |
| Glycerol (glycerine) | | | | |
| Distilled | .. | 353 | .. | 436 |
| Other | .. | | .. | 164 |
| Dyestuffs and pigments | .. | 63(b) | .. | 155 |
| General chemicals (excluding pharmaceutical chemicals) (c) | | | | |
| Inorganic (including inorganic gases) | .. | 3,875 | .. | 5,905 |
| Organic (including organic gases) | | | | |
| Ethyl alcohol | | | | |
| Duty-free | .. | 252 | .. | 440 |
| Duty-paid | .. | 4,654 | .. | 6,596 |
| Heterocyclic compounds | .. | 12,017 | .. | 5,847 |
| Solvents | .. | | .. | 2,381 |
| Other | .. | | .. | 9,401 |
| Other chemicals (eg mixtures of inorganic and organic chemicals) | | | | |
| Surface active materials (other than washing or scouring preparations) including wetting and emulsifying agents, sulphonated or sulphated oils, alcohols and hydrocarbons | .. | 19(b) | .. | 772 |
| Other | .. | | .. | 7,273 |
| Pharmaceutical chemicals (chemicals for therapeutic or prophylactic, including veterinary use, unmixed and uncompounded, including organo-therapeutic extracts of glands, etc but excluding products put up in measured doses) (d) | | | | |
| Anti-infective agents | | | | |
| Antibiotics (not in prepared form) | | | | |
| Penicillin | .. | 3,087 | .. | 2,744 |
| Tetracyclines | .. | | .. | 1,619 |
| Other | .. | | .. | 1,885 |

TABLE 10 (continued)

| | 1963 | | 1968 | |
|--|----------|--------|----------|--------|
| | Quantity | Cost | Quantity | Cost |
| Materials for use in production (continued) | | £'000 | | £'000 |
| Pharmaceutical chemicals (chemicals for therapeutic or prophylactic, including veterinary use, unmixed and uncompounded, including organo-therapeutic extracts of glands, etc but excluding products put up in measured doses) (d) (continued) | | | | |
| Anti-infective agents (continued) | | | | |
| Sulphonamides (not in prepared form) | .. | 714 | .. | 968 |
| Vaccines | .. | (e) | .. | 263 |
| Other anti-infective agents | .. | | .. | 1,742 |
| Hormones (excluding insulin) | .. | | .. | 2,905 |
| Corticosteroids | .. | (e) | .. | 678 |
| Other | .. | | .. | 678 |
| Pharmaceutical chemicals affecting metabolism and nutrition (including insulin) | | | | |
| Vitamins, provitamins, their salts and esters | .. | 1,484 | .. | 2,355 |
| Other pharmaceutical chemicals affecting metabolism and nutrition (including insulin) | .. | (e) | .. | 1,135 |
| Pharmaceutical chemicals acting on the nervous system | | | | |
| Acetylsalicylic acid | .. | 897(f) | .. | 780 |
| Other pharmaceutical chemicals acting on the nervous system | .. | (e) | .. | 6,144 |
| Other pharmaceutical chemicals | | | | |
| Of vegetable origin | .. | 1,839 | .. | 2,806 |
| Other | .. | 11,726 | .. | 13,500 |
| Medicinal and mineral oils and paraffin (other than for use as fuel) (g) | .. | 863 | .. | 412 |
| | Th.gal. | | Th.gal. | |
| | 46.3 | 14 | 29.4 | 11 |
| | Th.cwt. | | Th.cwt. | |
| | 0.6 | 3 | 0.5 | 6 |
| Lubricating oils and greases | .. | 14 | .. | 11 |
| 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 | .. | 1,469 | .. | 102 |
| Other | .. | 16,217 | .. | 1,559 |
| All other materials for use in production | .. | | .. | 12,550 |
| Packaging materials | | | | |
| Paper and board | | | | |
| Boxes, cartons, drums and canisters (with or without metal ends) of paper and cardboard | .. | 4,279 | .. | 4,584 |
| Fibreboard packing cases | .. | (h) | .. | 1,129 |
| Bags and multiwall paper sacks | .. | | .. | 133 |
| Wrapping and packing paper (including paper coated with plastics and any laminates incorporating paper but not metal) | .. | | .. | 558 |
| Paper and board for converting into packaging materials | .. | 1,336 | .. | 172 |
| Other packaging materials of paper and paperboard (including moulded pulp units and labels) | .. | (h) | .. | 1,441 |
| | .. | | .. | 1,441 |

Continued on next page.

TABLE 10 (continued)

| | 1963 | | 1968 | |
|---|--------------------|-------|--------------------|-------|
| | Quantity | Cost | Quantity | Cost |
| Packaging materials (continued) | | £'000 | | £'000 |
| Metal | | | | |
| Cans and boxes | .. | 2,051 | .. | 2,274 |
| Barrels, kegs and drums | Thousands 237 | 286 | Thousands 258 | 300 |
| Aluminium collapsible tubes, aluminium foil, and any laminates incorporating aluminium foil and aluminium foil labels and closures | .. | 99 | .. | 53 |
| Other packaging materials of metal including crown corks, wire, foil and any laminates incorporating foil (other than aluminium foil), foil labels and foil closures, tensional steel strappings, etc | .. | 1,349 | .. | 2,087 |
| Containers wholly or mainly of wood (including plywood boxes and drums), baskets and wickerwork crates | .. | 969 | .. | 606 |
| Glass containers (including glass syphons) | .. | 532 | .. | 208 |
| Transparent regenerated cellulose film | .. | 4,878 | 707,625 | 5,366 |
| In sheets or rolls | .. | 323 | .. | 271 |
| Bags | .. | 116 | .. | 17 |
| Plastics | .. | 116 | .. | 202 |
| Film (up to 0.01 inches thick) | .. | 116 | .. | 202 |
| Of polyethylene | .. | 116 | .. | 42 |
| Of other plastics materials | .. | 116 | .. | 202 |
| Bags and sacks | .. | 116 | .. | 111 |
| Up to 500 gauge | .. | 116 | .. | 111 |
| Other | .. | 116 | .. | 22 |
| Moulded and fabricated containers including closures and inserts | .. | 1,724 | .. | 1,795 |
| Large containers (with a capacity exceeding 1 gallon) | .. | 1,129 | .. | 47 |
| Bottles and bottle caps | .. | 1,129 | .. | 2,073 |
| Tubes (rigid and collapsible) | .. | 1,129 | .. | 302 |
| Other (excluding re-usable crates) | .. | 1,129 | .. | 446 |
| Fuel and electricity (i) | Th.tons | | Th.tons | |
| Coal | 181 | 803 | 100 | 493 |
| Coke (including screenings) and manufactured fuel | 14.6 | 79 | 1.0 | 11 |
| Derv fuel and motor spirit for use in road vehicles | Th.gal. 2,156 | 465 | Th.gal. 2,069 | 658 |
| Other liquid fuels (including creosote/pitch mixtures, etc and liquefied petroleum gases) | 23,394 | 900 | 33,251 | 1,428 |
| Gas | Th.therms 1,442 | 94 | Th.therms 1,316 | 99 |

TABLE 10 (continued)

| | 1963 | | 1968 | |
|--------------------------------------|----------|--------|----------|---------|
| | Quantity | Cost | Quantity | Cost |
| Fuel and electricity (i) (continued) | Th.kWh | £'000 | Th.kWh | £'000 |
| Electricity | 261,309 | 1,438 | 424,395 | 2,479 |
| All other fuels | .. | (h) | .. | 27 |
| Total cost of materials and fuel | | 84,925 | | 129,841 |
| Goods purchased for merchanting | | 12,971 | | 15,503 |
| Canteen purchases | | 723 | | 936 |
| Total cost of purchases | | 98,619 | | 146,280 |

- (a) Included in 'All other materials for use in production' for 1963.
(b) So far as separately recorded in 1963.
(c) For 1963 described as 'Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, etc) including pharmaceutical grades of heavy chemicals'.
(d) For 1963 described as 'Pharmaceutical chemicals (ie chemicals for therapeutic or prophylactic use, unmixed or uncompounded, excluding unmixed products put up in measured doses for therapeutic or prophylactic use)'.
(e) For 1963 included in 'Other pharmaceutical chemicals, unmixed or uncompounded, not put up in measured doses'.
(f) Including salicylates for 1963.
(g) For 1963 described as 'Medicinal oils and paraffin (other than for use as fuel)'.
(h) Not recorded separately for 1963.
(i) Owing to the risk of disclosure of information relating to individual firms, total quantities of electricity generated in firms' own establishments in this industry in 1963 and 1968 cannot be given.

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. | 837 | 719 |
| Transport costs | £'000 | 690 | 730 |
| Wages and salaries | " | 465 | 658 |
| Derv fuel and motor spirit | " | .. | 102 |
| Tyres and other spare parts for road goods vehicles | " | .. | 2,072 |
| Payments to other organisations for transport | " | 2,596 | 502 |
| by road | " | 2,596 | 502 |
| by rail and other means excluding postal services | " | .. | .. |
| Costs of operating road goods vehicles | " | 50 | 46 |
| Insurance | " | 39 | 59 |
| Vehicle licences | " | 237 | 315 |
| Depreciation | " | 92 | 110 |
| Payments to other organisations for repairs and maintenance | " | 92 | 110 |
| Total | " | 4,169(a) | 4,595 |

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

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

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

| | Amounts payable | |
|--|-----------------|--------------|
| | 1963 | 1968 |
| Repairs and maintenance to | | |
| Buildings | £'000 710 | £'000 746 |
| Road goods vehicles | 92 | 110 |
| Plant, machinery and other capital equipment | 1,021 | 1,864 |
| Insurance, licensing and depreciation of road goods vehicles (b) | 326 | 421 |
| Rates, excluding water rates | 1,186 | 1,786 |
| Hire of plant and machinery | 193 | 456 |
| Postage, telephone, telegrams, cables and telex (c) | 1,050 | 1,260 |
| Total | 4,578 | 6,642 |

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

(b) For details see Table 11.

(c) 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 | 2.4 | 0.5 |
| June | 9.8 | 17.4 |
| July | 0.8 | 0.1 |
| August | 1.6 | 6.7 |
| September | 3.3 | 0.6 |
| October | 3.3 | 5.2 |
| November | 11.4 | 12.2 |
| December | 39.8 | 33.4 |
| 1969 | | |
| January | 2.4 | 1.2 |
| February | 0.8 | 0.7 |
| March | 23.6 | 21.9 |
| April (b) | 0.8 | 0.1 |
| | 100 | 100 |

(a) From 6 April.

(b) To 5 April.