

# THE ADHESIVES INDUSTRY <br> 1959 



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## PUBLICATIONS

The results of the annual Census of Industry ate published by the Dominion Bureau of Statistics in a series of industry reports which are released each year as the compilations are completed. Reports for industries classified to the Chemicals and Allied Products Major Group are listed below, along with current and annual publications of related interest. Similar reports are issued for other industries. A complete catalogue of publications of the Bureau is available on request from the Information services Division, Dominion Bureau of Statistics, Ottawa, of from the Queen's Printer, Ottawa.

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## SYMBOLS

The interpretation of the symbols used in the tables throughout this publication is as follow's:

> .. figures not available.
> ... figures not appropriate or rot apricicaris.
> - nil or zero.
> p preliminary figures.
> ₹ revised figures.

## EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1959 Census of Manufactures. Most reports in this serles rafer to specific Industries, but there are summary reports for Canada and the provinces and for malot industry groups. An annual Census of Manufactures has been carfled out by the Dominion Bureau of Statistics since 1916.

Industry statistics given in these reports refer to number of establishments, employees, salaries and wages, cost of materials, supplies, fuel and electricity, gross value of shipments, inventories and value added by manufacturing. Detalls of matertals used and products shipped are also given. Descriptions of the principal industry statistics, with special reference to 1959 are as follows:

## Perlod Covered

Firns are asked to submit figures for the calendar year, if at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where the firms find it impossible to supply calendar year data from accounting records. However the data on employees, salaries and wages are requested on a calendar year basis in all cases.

## Establishment

Data for the annual census is collected on an establishment basis. A firm with more than one plant is required to ftle a report for each plant. In minst cases an establishment is a complete factory. Sometimes, however, a plant is divided into two or nore establishments when it carries out operations classiflable to different industries and when separate accounting records are avallable. Usually the statistics for an establishment relate only to the manufacturing activities. Other activities such as construction at the plant by its own employees, wholesale or retall activities carried on at the plant location, etc., are not included. Plarts engaged solely in repair work (except in the case of furniture, shipbuilding, boat building, aircraft and railway rolling stock industries) are not included but plants occupied in assembling parts into complete units are included.

## Employees

Administrative and office employees include all executives and supervisory officials such as presidents, vice-presidents, secretaries, treasurers, etc., together with managers, professional and technical employees, superintendents and factory supervisors above the working foremen level and clerical employees. Working owners and partners are also included in this category

Production and related workers include all other factory workmen whether pald on a monthly, weekly, hourly or piecework basis. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, warehousing and delivery staffs. Employees on new construction work, in retall or wholesale operations, on outside piece work etc., are not included.

Production workers are reported by months, an average for the year being obtained by summing the monthly figures and dividing by twelve. This procedure is followed even though the plant did not operate in all months. Figures on employment refer to calendar years whether of not some establishments reported other data on a financial year basis.

## Salaries and Wages

Salaries and wages refer to gross eamings of the employees described above, including salaries, wages, commissions, bonuses, the value of room and board where provided, deductions for income tax and social services such as sickness and unemployment insurance, pensions, etc., as well as any other allowances forming part of the employees' wages. Payments for overtime are included
salaries refer to amounts paid to administrative and office employees. Withdrawals by working owners of partners for normal living expenses for self and family are included but not their withdrawals for income tax. Wages refer to the amounts paid to production and related workers as defined above. Data on earnings refer to the calendar year whether or not some establishments reported other data on a financial year basis.

## Cost of Fuel and Electricity

Figures for fuel tefer to amounts actually used, (including fuel used in cars and trucks), not to purchases unless the quantities are the same. Values refer to the laid-down cost at the works, including freight, duty, etc.

## Materials and Supplies Used

Figures represent quantitles and laid-down cost values, at the works, of materials and supplies actually used during the year whether purchased from others or received as transfers from other plants of the reporting company. Amounts paid to other manufacturers for work done on materials owned by the reporting company are included. Returnable containers of any other items charged to capital account are not included. Fuels are not included. Goods bought from others or received as transfers from other plants of reporting companies for resale without further processing are not included. Maintenance and repair supplies not chargeable to capltal account are included.

## Factory Shipments

Factory shipments refer to shipments of goods made from own materials either in the reporting plant of by other manufacturers on the basis of a charge to the reporting plant for work done. All products and by-products shipped from the establishment are included whether for domestic use export, or for government departments. Transfer shipments to sales outlets, distributing warehouses or to other manufacturing units of the reporting firm are included. Goods bought or received as transfers and resold without further processing are not included. Values ate computed on $\mathrm{f}, \mathrm{a}, \mathrm{b}$. plant or
plant warehouse basis, and do not include sales tax or excise duties. Values of containers not returnable are included. Amounts received in payment for work done on materials owned by others are included.

In a few industries such as shlpbuilding. aifcraft, etc., where work on principal products extend over a relatively long period, the value of production is recorded rather than the value of shipments. For those industries production is computed from the value of deliveries of complete units during the yea: plus the value of work done during the year on unfinished units less the value of work done ir: previous years on finished units delivered in the year under review

## Inventories

Values represent the book values of manufac. turing inventoises owned and held at the reporting plant. Figures include inventories held in warehouses or selling outlets which have been included with plant operations for purposes of reporting shipments.

## Value Added by Manufacturing

Figures are computer from value of stipments plus or minus changes in inventories of finished goods and goods in process less cost of materials, fuel and electrlcity. This figure is sometimes referred to as net production. ${ }^{1}$

## Standard Industrial Classification

The Standard Industrial Classification Manual, prepared by the Dominion Bureau of Statistics, provides for 135 three-digit industries in the manufacturing sector, arranged in 17 major groups. Reporting establishments are classified or allotted tc specific industries on the basis of the value of principal products made or shipped.

## Short Forms

Between 1949 and 1957, in an effort to ease the reporting burden for smaller firms, a short form was used asking for the total value of shipments only or, in a few cases where losses of detail were significant, for quantities and values of principal products. For purposes of publication missing data were estimated on the basis of appropriate ratios. In general the cut-off point for these short forms was set at $\$ 50.000$ value of shipments. About $40 \%$ of the total number of establishments reported on the short form and accounted for less than 3 per cent of the total value of shipments.

In 1958, in order to establish a new base year, the small firms were asked to report all items of principal statistics together with some detail on materials and products.

[^0]For the 1959 Census, the short form was used again, but further steps were taken to ease the respondents' burden. First, the general limit for short forms was raised to $\$ 100,000$ value of shipments. In addition, a new intermediate form was developed. This form is a shortened version of the long form in that most of the general questions were pared down and the detailed lists of materials and products were limited to the more important items. The general limits for firms in this category were set at between $\$ 100,000-\$ 500,000$ value of shipments, but in the case of both the short and intermediate forms there were lower cut-offs for a number of industries in which the smaller firms accounted for a larget share of total shipments. On the other hand, limits were raised where this could be done without a significant loss of coverage. On most of the short forms for 1959, in addition to total value of shipments, data on principal products were requested. In a few industries, where loss of employment and earnings data were considered too lafge because of higher cut-offs, a question on total payroll was placed on the short form.

The intermediate and long forms provide complete data for the compilation of all elements of principal industry statistics and the details of materials and products. The one-page short form, although containing data on principal products and total value of shipments, does not request information on other elements of principal statistics such as value of inventofies, materials, fuel and electricity and, in most cases, employment and salaries and wages, nor does it contain detailed data on volume and value of materials used. For purposes of compiling aggregates of principal statistics by industry and by geographic location, the missing data for each establishment were estimated for 1959 by using, in general, ratios based on the change in the value of shipments between 1958 and 1959. The proportion of the estimated data was generally less than 5 per cent of the total in each category of principal statistics.

The general request for the principal items of products on the short form for 1959 permitted a fairiy complete compilation of the detailed quantities and values of commodity shipments. In the case of the detailed quantities and values of materials, fuel and electricity, however, and the monthly distribution of production workers, only the totals of data actually reported on the intermediate and long forms are contained in published reports and no attempt was made as in past years to estimate the generally small proportion of individual totals represented by detailed items omitted from the short forms.

The new approach has relieved an additional 12,000 establishments from filling out the regular long form. Establishments now receiving the short form number in excess of 20,000 and account for more than 54 per cent of the total number of establishments and a little more than 3 per cent of the total value of shipments.

# THE ADHESIVES INDUSTRY 

1959

This report on the Adhesives Industry in Canada covers the operations of all factories which made glue, mucilage, paste or special adhesives cements as their chief products. In 1959 there were 31 establishments in this group, 14 being located in Ontario; 10 in Quebec; 4 in British Columbia; 2 in Manitoba and 1 in Alberta.

Factory shipments by firms in the Adhesives Industry were valued at $\$ 14,638,817$ in 1959, an increase of 1,8 per cent over the $\$ 14,380,563$ reported in 1958. The number of employees decreased from 642 to 629, with an increase in salaries and wages from $\$ 2,556,561$ in 1958 to $\$ 2,683,622$ in 1959. The cost of fuel and electricity at $\$ 370,512$ showed a decrease from the $\$ 439,027$ reported in 1958 and the value of materials used directly in manufacturing processes was 6.7 per cent higher at $\$ 7,597,580$.

Output of adhesives during 1959, including small amounts from other industries, was as follows: linoleum cement, $15,899,000$ pounds at $\$ 834,000$; rubber cement. $1,154,000$ gallons at $\$ 3,325,000$; bone and hide glue, $8,021,000$ pounds at $\$ 1,946,000$;
casein glue, $1,072,000$ pounds at $\$ 297.000$; flexible glue, $2,787,000$ pounds at $\$ 691,000$; synthetic resin glue, $41,064,000$ pounds at $\$ 6,054,000$; vegetable glues, $25,922,000$ pounds at $\$ 3,116,000$; mucilage and paste valued at $\$ 530.000$; fish glue valued at $\$ 326,000$ and miscellaneous adhesives at $\$ 3,002,000$. The cotal value of all adhesives, including mucilage and paste was $\$ 20,121,000$ in 1959 compared with $\$ 18,903,000$ in 1958 and $\$ 19,463,000$ in 1957.

Note: Due to lack of inventory data, figures for value added by manufacture prior to 1954 were obtained by subtracting the cost of materials used, including fuel and electricity, from the total value of factory shipments. In 1954 and 1955 the "Value added" adjustment incorporated the increase or decrease to shipments values resulting from changes in the value of inventories over the period. For these two years, the adjustments that were made used ondy the change in finished product inventory owned by manufacturets. Beginning with 1956 the calculation of the "Value added" figure was further adjusted to take into account the "Goods in process" as well as the finished goods held at plant or plant warehouse.

TABLE 1. Principal Statistics of the Adhesives Industry, Significant Years 1929-59 and by Provinces, 1958 and 1959

| Year and province | Estab-lishments | Ernployees | Salaries <br> and <br> wiages | Cost of fuel and electricity at plant | Cost of materials at plant | Value added by manufacture ${ }^{1}$ | Gross selling value of products ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | number |  | dollars |  |  |  |  |
| 1929 | 131267 |  | 321, 296 | 68,15753,300 | 962,940 | 799,5471 | 1,830,644 |
| 1932 | 14 | 229 | 263,142 |  | 457, 146 | 576, 769 | 1,087, 215 |
| 1937 | 18 | 416 | 483, 819 | 116,842 | 901, 194 | 886,101 | 1,904,137 |
| 1939 |  | 427 | 520,662 | 89,573 | 905, 411 | 1, 115, $82{ }^{\text {n }}$ | 2,110, 806 |
| 1943 | 19 22 | 651 | i, 091.721 | 211, 889 | 3,037,649 | 2,486,613 | 5,736,151 |
| 1946 | 22 | 674 | 1, 223, 032 | 222,384 | 3,749,579 | 2,812,350 | 6,784,313 |
| 1949 | 22 25 | 749 | 1.727, 848 | 339,839 | 4,218,359 | 3,266,366 | 7.824,564 |
| 1955 | 29 | 576 | 1,934.597 | 369,578 | 5, 030,858 | 5,368,263 | 10,908,938 |
| 1956 | 29 | 611 | 2,152,918 | 412,238 | 5,423,688 | $6,456,530$ | 12, 329, 512 |
| 1957 | 29 | 627 | $2,321,588$ | 456, 150 | $6,475,344$ | 6.720, 361 | 13, 707, 648 |
| 1958 |  |  |  |  |  |  |  |
| Quebec |  | 10 | 140 | $\begin{array}{r} 585,299 \\ 1,913,368 \end{array}$ | $\begin{array}{r} 52,763 \\ 382,770 \end{array}$ | 1,883, 061 | 1,610,921 | 3,504,397 |
| Ontario | 14 | 485 | $\begin{array}{r} 4,984,929 \\ 252,730 \end{array}$ |  |  | 4,862,758 | 10,235,749 |
| British Columbia $\qquad$ Manitoba | 1 | 17 |  | 57,894 | 3,494 | 398,945 | 640.417 |
| Canada | 28 | 642 | 2,556,561 | 439,027 | 7,120,720 | 6,872,624 | 14,380,563 |
| 1959 |  |  |  |  |  |  |  |
| Quebec | 10 | 135 | 584,914 | 48,442 | 1.984, 147 | 1,859,174 | 3.870,449 |
| Ontario... | 14 | 467 | 2,006,839 | 317, 264 | 5, 298, 334 | 4,530,817 | 10,035,023 |
| British Columbin | 4 | 27 |  |  |  |  |  |
| Menitobe Alberta | 2 | 27 | 91,869 | 4,806 | 315, 099 | 417,079 | 733,345 |
| Canada | 31 | 629 | 2,683, 622 | 370,512 | 7,597,580 | 6,807,070 | 14,638,817 |

${ }^{1}$ See note to text.
Note: Profits or losses cannot be calculated from the above figures as data are not avaliable for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 2. Inventories. ${ }^{2} 1959$

|  | Raw materials and supplies | Goods in process | Finished goods of own manufacture | Tctal |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Orening: |  |  |  |  |
| Quebec | 277.972 | 15,875 | 179,082 | 472.929 |
| Ontario | 744. 161 | 49,312 | 877.099 | 1.670.572 |
| Other provinces | 44,387 | - | 38,412 | 82, 799 |
| Canada | 1,066,520 | 65.187 | 1,094,593 | 2.226. 300 |
| Ciosing: |  |  |  |  |
| Quebec | 375,355 | 4.981 | 211.290 | 591.626 |
| Ontario | 769, 758 | - | 1.037.803 | 1.807.561 |
| Other provinces | 66,979 | 384 | 41,667 | 109. 030 |
| Canada | 1,212,092 | 5.365 | 1.290,760 | 2.508.217 |

: (a) Book value of all manufacturing inventories owned and held at piant and plant warehouses.
(b. Beginning with 195q, information on the value of year-end invento:s holdings a: piant and plant warehouses is being coliectec as part of the annuai Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Adhesives Irdustry for the year under review are shown in the above table.
(c) The opening inventory for 1959 does not necessarily agree with the closing inventory for 1958, because of the addition of new piants, the transter of plants to other industries and plants going out of business, etc. However, the value adjed figures for the previous year have not been recalculated to allow for the changes mentioned above.

TABLE 3. Products Made in the Adhesives Industry, 1958 and 1959

| Product | 1958 |  | 1959 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quartity | Value of factory shipments | Quantity | Value of factory shipments |
|  |  | \$ |  | \$ |
| Cement: |  |  |  |  |
| Linoleum ....................................................... 1 l . | 8.902.975 | 418.230 | 7.905.575 | 406.601 |
| Other (rubber, etc.) ....................................... " | ... | 1.281,054 | ... | 1,218, 020 |
| Glue: |  |  |  |  |
| Bone and bide ${ }^{1}$.................................................. ${ }^{\text {Ib }}$. | 10,191,811 | 2.436,807 | 8,020,713 | 1.945,619 |
| Casein ........................................................... " | 561,019 | 140, 266 | 712,892 | 169.769 |
| Flexible ....................................................... | 2.715 .410 | 638,122 | 2,787.463 | 691.130 |
| Synthetic resin | 8,845,889 | 2,603,333 | 9.692. 225 | 3.142.519 |
| Vegetable: |  |  |  |  |
| Dry ................................................................ ${ }^{\text {. }}$ | 2.351.994 | 300,303 | 2,558,408 | 328,713 |
| Liquid ....................................................... " | 20,340,326 | 2,443,841 | 23,364,196 | 2, 787, 143 |
| Other | ... | 278,088 |  | 484,101 |
| Mucilage and paste ............................................ 16. | 4,473.384 | 54, 077 | 3,246,817 | 484,785 |
| All other products ${ }^{2}$............................................. | . $\cdot$ | 3,293,442 | ... | 2,980,417 |
| Totals | ... | 14,380,563 | ... | 14,638,817 |

[^1]TABLE 4. Materials Used in the Adhesives Industry, 1958 and 1959

| Aaterial |  | 1958 |  | 1959 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Cost at works | Quantity | Cost at works |
|  |  |  | \$ |  | \$ |
| Acid, sulphuric (as 100\%) .................................... | 1 l. | 1,299.040 | 18.877 | 1.101.454 | 15.908 |
| Alcohol, ethyl, denatured or not (including tax)...... | Imp. Eal. | 41.691 | 31.528 | 31,420 | 27.312 |
| Alcohol, methyl .................................................. | $\because$ | 23,515 | 13. 230 | 14.943 | 10,037 |
| Bones | ton | 14.432 | 448.034 | 12,468 | 312,996 |
| Borax | 1 b . | 862,308 | 41,683 | 859,050 | 43.332 |
| Hides and hide trimmings ....................................... | ton | 21.531 | 303,016 | 19.437 | 308, 677 |
| Casein ..................................................................... | 1 b . | 487. 194 | 130,859 | 559. 210 | 132.066 |
| China-clay .......................................................... | " | 5.488.224 | 95.227 | 3. 228.975 | 81, 583 |
| Dextrine | " | 7,799,630 | 727, 830 | 7. 592,648 | 708.982 |
| Flour: |  |  |  |  |  |
| Potato $\qquad$ <br> Tapioca. $\qquad$ | ". | 261.596 382.748 | 19,817 41,879 | 183, 187 394. 934 | 13.473 46.030 |
|  | " | 3.786, 725 | 163,353 | 3.372. 321 | 164, 182 |
| Other .................................................................... | " | 242, 174 | 13,390 | 214.940 | 12.567 |
| Formaldehyde ( $100 \%$ solids content) ..................... | " | 100.733 | 9,768 | 131,987 | 12.873 |
| Glucose ................................................................... | " | 609.494 | 44,083 | 456.734 | 32. 484 |
| Glue: |  |  |  |  |  |
| Bone and hide <br> Fish. | ", | $\begin{array}{r} 1.245,111 \\ 852,265 \end{array}$ | $\begin{aligned} & 333,699 \\ & 175,775 \end{aligned}$ | $\begin{array}{r} 1,641,151 \\ 250,943 \end{array}$ | $\begin{array}{r} 437.206 \\ 47,751 \end{array}$ |
| Glycerine ............................................................. | " | 147. 723 | 42,270 | 152.625 | 45,419 |
| Gums and resins, natural | * | 547.717 | 72,946 | 658.210 | 87.300 |
| Lignin liquor ....................................................... | Imp. gal. | 294.377 | 34,336 | 255.006 | 32.227 |
| Lime | ton | 611 | 11.477 | 526 | 9,905 |
| Phenol | lb. | 17.929 | 3.932 | 20. 552 | 5. 267 |
| Resins, synthetic ................................................ | ' | 5.972.763 | 1.172,060 | 7. 147. 288 | 1.240,084 |
| Rubber or latex | " | 1,268, 175 | 341,054 | 1. 454,660 | 437.080 |
| Sodium carbonate (soda ash) ................................. | " | 98.414 | 3.756 | 184,415 | 5,734 |
| Sodium nuoride ...................................................... | $\because$ | 42.314 | 6. 257 | 37.847 | 5. 548 |
| Sodium hydroxide (caustic soda)............................. | 。 | 158.993 | 12.281 | 297.875 | 21.459 |
| Solvents (benzol, naphtha, etc.) ............................ | Imp. gal. | 320.912 | 220,364 | 363.424 | 201.646 |
| Starch, corn .......................................................... | 1 b . | 1.317.743 | 98,927 | 567. 469 | 55. 464 |
| Sulphur ................................................................. | ${ }^{4}$ | 122.600 | 2. 197 | 124,000 | 2,334 |
| Urea, crystal ....................................................... | " | 395.561 | 26, 435 | 419,373 | 29,315 |
| Whiting ................................................................. | " | 358, 513 | 10.071 | 289, 201 | 10.099 |
| Zinc sulphate | " | 138.740 | 7,393 | 138,902 | 7.423 |
| Containers and packing materials ........................... |  | ... | 895, 353 | ... | 1.089,890 |
| A 01 viner materials ${ }^{1}$............................................. |  | -•• | 1,547.563 | -•* | 1.903.927 |
| Totals ............................................................ |  | . . | 7.120, 720 | $\ldots$ | 7.59\%.580 |

[^2]TABLE 5. Factory Shipments of Adhesives, from All Industries, 1958 and 1959

| Item | 1958 |  | 1959 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value of factory shipments | Quantity | Value of factory shipments |
|  |  | \$ |  | \$ |
| Cement: |  |  |  |  |
| Linoleum ......................................................... ${ }^{\text {d }}$ b. | 15,983.000 ${ }^{\text {r }}$ | 818,000 | 15,899,000 | 834.000 |
| Rubber .......................................................... gal. | 1.105.0C0 | 2,888,000 | 1.154,000 | 3,325,000 |
| Other | ... | 837,000 |  | 789,000 |
| Glue: |  |  |  |  |
| Bone and hide ${ }^{\text {a }}$.............................................. 1 l b. | 10.192.000 | 2.437.000 | 8,021,000 | 1.946.000 |
| Casein ......................................................... " | 891.000 | 240,000 | 1,072,000 | 297,000 |
| Flexible ....................................................... " | 2,715,000 | 638,000 | 2.787,000 | 691,000 |
| Fish ............................................................ | 1.185.000 | 326,000 | 981,000 | 326,000 |
| Synthetic resin ............................................. lb. | 37,666,000 | 5,641,000 | 41,064,000 | 6.054 .000 |
| Vegetable: |  |  |  |  |
| Dry ........................................................... | 2.352,000 | 300.000 | 2,558,000 | 329.000 |
| Liquid ...................................................... " | 20,340,000 | 2.444,000 | 23,364,000 | 2, 787,000 |
| Other ........................................................... | ... | 278,000 | ... | 260.000 |
| Mucilage and paste ........................................... | ... | 652,000 | . . | 530.000 |
| Adhesives, other ............................................. | ... | 1,404,000 |  | 1,953,000 |
| Totals ........................................................ | ... | 18,903,000 | . $\cdot$ | 20,121, 000 |

${ }^{1}$ See footnote to Table 11.

TABLE 6. Principal Statistics of the Adhesives Industry, classified according to Type of Ownership 1958 and 1959

| Type | Fstab-lishments | Fmployees | Salaries and wages | Cost at plant of materials used | Selling value of factory shipments |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | number |  | dollars |  |  |
| Individual ownership | 3 | 12 | 33,060 | 58,732 | 133.960 |
| Partnership | 1 |  |  |  |  |
| Incorporated companies | 24 | 630 | 2,523,501 | 7,061.988 | 14,246,603 |
| Totals | 28 | 642 | 2,556,561 | $7.120,720$ | 14,380,563 |
| Individual ownership | 3 | 14 | 35,750 | 79,777 | 174,170 |
| Partuerstips | 2 |  |  |  |  |
| Incorporated companies | 26 | 615 | 2,647,872 | 7.517.804 | 14,464.647 |
| Totals | 31 | 629 | 2,683,622 | 7,597,581 | 14,638,817 |

TABLE 7. Principal Statistics of the Adhesives Industry in Canada, grouped according to Size of Establishment, 1958 and 1959


TABLE 8. Capital and Repair Expenditures in the Adhesives Industry, 1954-59


TABLE 9. Employees and their Earnings in the Adhesives Industry, 1958 and 1959

| Province | Employees |  |  |  |  | Earnings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Supervisory and office |  | Production workers |  | Total | Supervis ory and office | Production workers | Total |
|  | Male | Female | Male | Female |  |  |  |  |
|  | number |  |  |  |  | dollars |  |  |
| Quebec ....................................... | 40 | 31 | 67 | 2 | 140 | 323.918 | 261,381 | 585,299 |
| Ontario | 104 | 58 | 300 | 23 | 485 | 802,859 | 1,110,509 | 1,913,368 |
| Manit sba and British Columbia .... | 5 | 4 | 8 | - | 17 | 28,619 | 29,275 | 57,894 |
| Canada ................................ | 149 | 93 | 375 | 25 | 642 | 1,155,396 | 1,401,165 | 2,556,561 |
| 1959 |  |  |  |  |  |  |  |  |
| Quebec ....................................... | 40 | 30 | 62 | 3 | 135 | 319,613 | 265,301 | $584,914$ |
| Ontarlo ....................................... | 96 | 57 | 286 | 28 | 467 | 873,153 | 1,133,686 | 2,006,839 |
| Manitoba, Alberta and British Columbia $\qquad$ | 9 | 4 | 14 | - | 27 | 45,093 | 46.776 | 91.869 |
| Canada ................................ | 145 | 91 | 362 | 31 | 629 | 1,237,859 | 1,445,763 | 2,683,622 |

TABLE 10. Production Workers in the Adhesives Industry, by Months, 1959

| Month | Establishments reporting monthly detail ${ }^{1}$ |  |
| :---: | :---: | :---: |
|  | Male | Female |
| January | 364 | 29 |
| February | 371 | 29 |
| March | 378 | 29 |
| April | 376 | 28 |
| May | 366 | 29 |
| June | 350 | 30 |
| July | 293 | 29 |
| August | 353 | 34 |
| September | 342 | 35 |
| October | 346 | 29 |
| N ovember | 317 | 30 |
| December | 323 | 29 |
| Average for establishments reporting monthly detail | 349 | 30 |
| Average estimated for small establishments ${ }^{2}$ | 13 | 1 |
| Average for all establishments | 362 | 31 |

[^3]TABLE 11. Imports of Adhesives, 1958 and 1959

| Item: | 1958 |  | 1959 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | pounds | \$ | pounds | \$ |
| Glue: |  |  |  |  |
| Animal ${ }^{1}$............................................................... | 7,181,373 | 1,147,011 | $5,197,515$ | 817,402 |
| Syntbetic fesin ....................................................... | 2,836,508 | 886,310 | 3,310,311 | 978,828 |
| Other ............................................................................. | 104,099 | 36,758 | 55,636 | 26,137 |
| Mucilage and adhesive paste ...................................... | 393,250 | 92,400 | 343, 183 | 85,142 |
| Rubber cement ................................................................ | -* | 838,475 | . . . | 881,880 |

[^4]TABLE 12. Fuel and Electricity Used in the Adhesives Industry, 1959

| Kind | Quantity | Cost at plant |
| :---: | :---: | :---: |
|  |  | \$ |
| 1. Establishments reporting commodity detail:* |  |  |
| Bituminous coal-Imported .......................................................... to. | 20.837 | 216,648 |
| Coke |  | 1,191 |
| Gasoline (including gasoline used in cars and trucks) ................... Imp.gal. | 74,251 | 28,777 |
| Fuel oll including kerosene or coal oll | 494, 666 | 52,981 |
| Gas (a) Liquefied petroleum gases | $1,254$ | 435 |
| (b) Natural gas <br> Mcf. | $2,786$ | 4,218 |
| Electricity purchased ................................................................ kwh. | 5,296,919 | 48,319 |
| Steam purchased ...................................................................... | , . | 9,700 |
| 2. Estimate for establishments for which no data were collected: ${ }^{2}$ Cost of fuel and electricity | *** | 8,243 |
| 3. All establishments: <br> Total cost of fuel and electricity | * . | 370,512 |

${ }^{2}$ Establishments generally reporting value of shipments of $\$ 200,000$ and over.
${ }^{2}$ Establishments generally reporting value of shipments of less than $\$ 200,000$

List of Firms in the Adhesives Industry, 1959

| Name | Address |
| :---: | :---: |
| Quebec: |  |
| Arol Chemical Co. Ltd. | 2520 Bates Rd. Montreal |
| B.B. Chemical Co, of Canada | 2610 Bennett Ave., Montreal |
| Canadian Adhesives Ltd. | 410 Marlen Ave., Montreal |
| Dominion Flour Paste Co., The | 2619 Charlemagne, Montreal |
| Dural Products Ltd, | 41 Marshall Ave., Dorval Station |
| General Adhesives | St. Janvier |
| Industrial Adhesives Ltd. | 2425 Bois Franc Rd., Ville St. Lourent |
| National Starch \& Chemical (Canada) Ltd. | 2125 Remembrance Road, Lachine |
| Swlit Canadian Co. Ltd. | 215 Magulre St., Montreal.. |
| Wolverine Products \& Sales Limited | 1501 Bercy St., Montreal |
| Ontario: |  |
| Borden Chemical Co. (Canada) Ltd., The | West Kill |
| Canada Glue Co. Limited | Mohawk Road, Brantford |
| Continental Chemical Company | 8 Bansley Ave., Toronto |
| Deplex Adhesives Ltd. ........... | 133 Jefferson Ave., Toronto |
| Fiarris, W., \& Co., Limited | 600 Lakeshore Blva. E., Toronto |
| Industrial Adheslves Lid. | 90 Tycos Drive, Toronto |
| Le Page's Inc. | 404 Klpling Ave., Toronto |
| Machon Sealing Wax Company, The | 678 Parliament St., Toronto |
| McCormick \& Co. (Canade) Limited | 164 Bentworth, Toronto |
| National Starch \& Chemical (Canada) Ltd. | 363-379 Wallace Ave., Toronto |
| Stadex-Pirie Limited | 119 Water St., Brockville |
| Stein-Hall Limited | 1130 Dupont St., Toronto |
| Swift Canadian Co, Ltd. | 1960 St. Clair Ave. W. . Toronto |
| Wolverine Cement Company Limited | 200 Grand River Ave., Brantford |
| Manitobe: |  |
| Fuller, H.B. Company (Canada) Ltd. | 1400 Sargent Ave., Winnlpeg |
| Swift Canadian Co. Ltd. | Archibald St. St. Bonface |
| Alberta: |  |
| Wendar Adhesives Corp. | 7869-75th St. , Edmonton |
| Rritish Columbia: |  |
| G.R. Chemicals Ltd. | 450 Vernon Dr., Vancouver |
| Swift Canadian Co. Ltd. | Brunette St., New Westminster |
| Uniplast Products Ltd. | 750 Powell Ave., Vancouver |
| Universal Enterprises Ltd. | 236 Esplande E., N. Vancouver |




[^0]:    ${ }^{2}$ To artive at the National Accounts concept of "gross domestic product at factor cost", it would be necessary to subtract also the cost of office supplies used, advertising, insurance and other goods and services obtained from other businesses. Data on these inputs are not collected on the annual Census of Manufactures. Value acded figures for "The primary industries and construction' are published in D.B.S. publication 61-202, Survey of Produczion

[^1]:    ${ }^{1}$ See footnote to Table 11.
    ${ }^{1}$ Includes sealing wax, grease, tallow, tankage, blended starches, dextrines, steamed bone and other such product: which were reported by only one of two firms in this industry.

[^2]:    ${ }^{2}$ No detailed information on materials used was collected from firms generally reporting value of shipments of less thas $\$ 200,000$. The total estimated value of materials used by these firms was $\$ 280,868$ and this amount is included in "All other materials and supplies used".

[^3]:    ${ }^{1}$ The number of production workers, by months, was collected only for establishments generally reporting value of shipments of $\$ 200,000$ and over.
    ${ }^{5}$ For establishments generally reporting value of shipments of less than $\$ 200,000$, no data on number of workers were collected. Average was estimated by using change in value of shipments to arrive at value of payroll which was then used in conjunction with estimated average earnings to arrive at number of workers.

[^4]:    ${ }^{1}$ Some of the material shown under this heading was mixed with domestically produced bone and hide glue to increast the bonding strength of the latter and, therefore, appears again in the figures shown in tables 3 and 5 for bone and hide glue.

