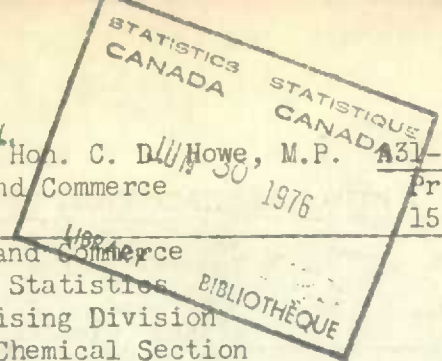


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Annual Industry Report Chemicals and Allied Products Group

THE ADHESIVES INDUSTRY, 1947

This report on the Adhesives Industry in Canada covers the operations of all factories which made glue, mucilage, paste or special adhesive cements as their chief products. In 1947 there were 26 establishments in this group, 16 being located in Ontario, 8 in Quebec and 2 in British Columbia.

Production increased 9.3 per cent in 1947 to \$7,415,610, the number of employees increased 8.3 per cent to 729, and salaries and wages increased 26.8 per cent to \$1,551,084. The cost of fuel and electricity at \$274,789 was greater by 23.9 per cent than in 1946, and the value of materials used direct in manufacturing processes was 14.7 per cent higher at \$4,303,021.

The output of bone and hide glue increased to 2,901 tons worth \$1,557,285 from 2,612 tons at \$1,081,705 in 1946; vegetable glues increased to 10,682 tons at \$1,610,041 from 10,324 tons at \$1,482,570, and other glues totalled 5,642 tons valued at \$1,357,335 as against 6,229 tons at \$1,484,980 in the previous year. Mucilage and paste were made by concerns in other industries, particularly by the manufacturers of inks, and the total production from all sources amounted to \$500,055 in 1947 and to \$537,011 in 1946.

Table 1 - PRINCIPAL STATISTICS OF THE ADHESIVES INDUSTRY, 1938-1947

| Year | Number of plants | Average number of employees | Salaries and wages | Cost of fuel and electricity at works | Cost of materials at works | Gross selling value of products at works |
|----------------------------------|------------------|-----------------------------|--------------------|---------------------------------------|----------------------------|--|
| | | | \$ | \$ | \$ | \$ |
| 1938 | 19 | 415 | 496,950 | 115,972 | 851,529 | 1,904,258 |
| 1939 | 19 | 427 | 520,662 | 89,573 | 905,411 | 2,110,806 |
| 1940 | 21 | 497 | 621,451 | 146,661 | 1,120,288 | 2,789,389 |
| 1941 | 22 | 599 | 753,491 | 164,820 | 1,858,728 | 3,675,631 |
| 1942 | 21 | 559 | 842,026 | 200,142 | 2,265,181 | 4,630,667 |
| 1943 | 22 | 651 | 1,091,721 | 211,889 | 3,037,649 | 5,736,151 |
| 1944 | 24 | 631 | 1,123,129 | 232,435 | 3,139,664 | 5,626,892 |
| 1945 | 20 | 576 | 1,067,337 | 166,210 | 2,662,236 | 5,422,488 |
| 1946 | 22 | 674 | 1,223,032 | 222,384 | 3,749,579 | 6,784,313 |
| 1947 | 26 | 729 | 1,551,084 | 274,789 | 4,303,021 | 7,415,610 |
| Per cent change 1947 from 1946.. | .. | +8.3 | +26.8 | +23.9 | +14.7 | +9.3 |

Note: Profits or losses cannot be calculated from figures in Table 1 as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

(29 Nov 1948)

Adhesives

Table 2 - PRINCIPAL STATISTICS, BY PROVINCES, 1946 and 1947

| Province | Number of plants | Average | Salaries and wages | Cost of | Cost of materials at works | Gross sell- |
|------------------|------------------|---------------------|--------------------|-------------------------------|----------------------------|--------------------------------|
| | | number of employees | | fuel and electricity at works | | ing value of products at works |
| | | | | | | |
| 1946 | | | | | | |
| Quebec | 8 | 178 | 300,016 | 41,155 | 1,045,880 | 1,808,744 |
| Ontario | 12) | 496 | 923,016 | 181,229 | 2,703,699 | 4,975,569 |
| British Columbia | 2) | | | | | |
| CANADA | 22 | 674 | 1,223,032 | 222,384 | 3,749,579 | 6,784,313 |
| 1947 | | | | | | |
| Quebec | 8 | 174 | 364,634 | 42,141 | 1,028,917 | 1,710,883 |
| Ontario | 16) | 555 | 1,186,450 | 232,648 | 3,274,104 | 5,704,727 |
| British Columbia | 2) | | | | | |
| CANADA | 26 | 729 | 1,551,084 | 274,789 | 4,303,021 | 7,415,610 |

Table 3 - EMPLOYEES, SALARIES AND WAGES, 1946 and 1947

| | Average Number of Employees | | | | | Salaries | Wages | TOTAL SALARIES and WAGES |
|------------------|-----------------------------|--------|----------|--------|-------|----------|---------|--------------------------|
| | On Salaries | | On Wages | | TOTAL | | | |
| | Male | Female | Male | Female | | | | |
| | | | | | | \$ | \$ | \$ |
| 1946 | | | | | | | | |
| Quebec | 31 | 24 | 98 | 25 | 178 | 124,787 | 175,229 | 300,016 |
| Ontario and | | | | | | | | |
| British Columbia | 82 | 38 | 357 | 19 | 496 | 308,621 | 614,395 | 923,016 |
| CANADA | 113 | 62 | 455 | 44 | 674 | 433,408 | 789,624 | 1,223,032 |
| 1947 | | | | | | | | |
| Quebec | 33 | 21 | 100 | 20 | 174 | 154,260 | 210,374 | 364,634 |
| Ontario and | | | | | | | | |
| British Columbia | 101 | 52 | 391 | 11 | 555 | 402,697 | 783,753 | 1,186,450 |
| CANADA | 134 | 73 | 491 | 31 | 729 | 556,957 | 994,127 | 1,551,084 |

Table 4 - WAGE-EARNERS, BY MONTHS, 1946 and 1947 (On the last work-day of each month)

| Month | 1946 | | | 1947 | | |
|-----------------|------|--------|-------|------|--------|-------|
| | Male | Female | TOTAL | Male | Female | TOTAL |
| January | 403 | 48 | 451 | 508 | 32 | 540 |
| February | 427 | 50 | 477 | 521 | 31 | 552 |
| March | 423 | 46 | 469 | 513 | 41 | 554 |
| April | 417 | 47 | 464 | 500 | 39 | 539 |
| May | 486 | 51 | 537 | 499 | 37 | 536 |
| June | 474 | 45 | 519 | 489 | 42 | 531 |
| July | 455 | 42 | 497 | 471 | 34 | 505 |
| August | 462 | 40 | 502 | 447 | 25 | 472 |
| September | 470 | 40 | 510 | 451 | 23 | 474 |
| October | 467 | 35 | 502 | 495 | 26 | 521 |
| November | 476 | 39 | 515 | 502 | 24 | 526 |
| December | 475 | 33 | 508 | 501 | 22 | 523 |
| AVERAGE | 455 | 44 | 499 | 491 | 31 | 522 |

Table 5 - FUEL AND ELECTRICITY USED, 1946 and 1947

| Kind | Unit of measure | 1946 | | 1947 | |
|---|-----------------|-----------|---------------|-----------|---------------|
| | | Quantity | Cost at works | Quantity | Cost at works |
| Anthracite coal | ton | 25 | \$ 303 | 35 | \$ 400 |
| Bituminous coal - | | | | | |
| Canadian | ton | 2,865 | 26,652 | 195 | 1,884 |
| Foreign | ton | 17,991 | 145,780 | 22,785 | 209,888 |
| Coke | ton | 147 | 1,777 | 149 | 2,005 |
| Gasoline | Imp.gal. | 37,571 | 10,668 | 51,513 | 17,118 |
| Kerosene | Imp.gal. | 128 | 23 | ... | ... |
| Fuel oil | Imp.gal. | 118,907 | 12,062 | 195,441 | 16,443 |
| Wood | cord | 5 | 36 | 6 | 44 |
| Gas - Manufactured .. | M cu.ft. | 2,083 | 1,821 | 1,746 | 1,666 |
| Other fuel | ... | ... | 555 | ... | ... |
| Electricity purchased | K.W.H. | 1,795,257 | 22,707 | 2,269,328 | 25,341 |
| TOTAL | ... | ... | 222,384 | ... | 274,789 |
| Electricity generated for own use | K.W.H. | 450,000 | ... | 636,000 | ... |

Table 6 - POWER EQUIPMENT, 1946 and 1947

| | Ordinarily in Use | | In Reserve or Idle | |
|---|-------------------|-------------------------|--------------------|-------------------------|
| | Number of units | Total rated horse power | Number of units | Total rated horse power |
| <u>1946</u> | | | | |
| Steam engines and steam turbines | 11 | 716 | 1 | 25 |
| Electric motors run by purchased power | 296 | 1,631 | 46 | 184 |
| TOTAL | 307 | 2,347 | 47 | 209 |
| Electric motors run by power generated in establishment ... | 19 | 258 | 5 | 61 |
| Stationary power boilers | 9 | 1,440 | ... | ... |
| <u>1947</u> | | | | |
| Steam engines and steam turbines | 8 | 586 | 1 | 25 |
| Gasoline, gas and oil engines, other than Diesel | ... | ... | 1 | 5 |
| Electric motors run by purchased power | 382 | 2,175 | 71 | 543 |
| TOTAL | 390 | 2,761 | 73 | 573 |
| Electric motors run by power generated in establishment ... | 19 | 258 | 5 | 61 |
| Stationary power boilers | 12 | 1,915 | 1 | 150 |

Table 7 - MATERIALS USED IN MANUFACTURING, 1946 and 1947

| | Unit of measure | 1946 | | 1947 | |
|---|-----------------|------------|---------------------|-----------|---------------------|
| | | Quantity | Cost at works \$ | Quantity | Cost at works \$ |
| Bones | ton | 8,453 | 202,664 | 7,809 | 169,313 |
| Hides and hide trimmings.. | ton | 19,083 | 463,569 | 18,208 | 496,337 |
| Casein | lb. | 1,098,804 | 261,515 | 912,412 | 252,373 |
| Dextrine | lb. | 5,871,830 | 514,602 | 7,794,370 | 696,045 |
| Flour, tapioca | lb. | 2,800,130 | 338,568 | 888,909 | 106,569 |
| Flour, soya bean | lb. | 2,223,166 | 130,824 | 1,871,383 | 114,238 |
| Flour, other | lb. | 14,858,201 | 361,506 | 9,985,191 | 357,349 |
| Glycerine | lb. | 315,122 | 46,283 | 219,736 | 47,582 |
| Gums and resins, natural.. | lb. | 366,484 | 50,848 | 347,612 | 45,704 |
| Lime | ton | 632 | 7,937 | 554 | 6,439 |
| Resins, synthetic | lb. | 325,433 | 65,210 | 160,360 | 35,506 |
| Rubber | lb. | 91,232 | 24,285 | 89,026 | 26,693 |
| Solvents (benzol, naphtha, etc.) | gal. | 314,898 | 46,857 | 197,993 | 43,869 |
| Starch | lb. | 2,600,420 | 172,696 | 1,344,680 | 96,288 |
| Sulphur | lb. | 128,000 | 1,525 | 185,930 | 2,199 |
| Sulphuric acid 66° Be | lb. | 995,749 | 9,235 | 1,399,707 | 12,800 |
| Tallow and fat | lb. | 63,741 | 8,231 | 6,497,075 | 331,336 |
| Containers and packing materials | ... | ... | 126,917 | ... | 213,061 |
| All other materials | ... | ... | 916,307 | ... | 1,249,320 |
| TOTAL | ... | ... | 3,749,579 | ... | 4,303,021 |

Table 8 - PRODUCTS MADE IN THE ADHESIVES INDUSTRY, 1946 and 1947

| Product | 1946 | | 1947 | |
|-----------------------------|-----------------|------------------------------------|-----------------|------------------------------------|
| | Quantity lb. | Selling value at works \$ | Quantity lb. | Selling value at works \$ |
| Cements - Linoleum | 1,624,790 | 87,800 | 2,230,276 | 133,432 |
| Other | 761,925 | 119,276 | 147,643 | 164,859 |
| Glue - Bone and hide | 5,224,629 | 1,081,705 | 5,802,196 | 1,557,285 |
| Casein | 1,085,248 | 257,881 | 731,838 | 200,049 |
| Flexible | 1,235,638 | 228,415 | 1,116,738 | 217,718 |
| Synthetic resin | 7,288,511 | 769,024 | 7,239,294 | 729,672 |
| Vegetable--Dry | 2,668,283 | 206,407 | 3,638,631 | 320,476 |
| Liquid .. | 17,979,398 | 1,276,163 | 17,724,886 | 1,289,565 |
| Other | 2,848,548 | 229,660 | 2,196,334 | 209,896 |
| Mucilage and paste | 6,541,498 | 444,982 | 6,008,233 | 414,194 |
| All other products (*) | ... | 2,083,000 | ... | 2,178,964 |
| TOTAL | ... | 6,784,313 | ... | 7,415,610 |

(*) Includes sealing wax, casein, buttermilk powder, grease, tallow, tankage, blended starches, dextrines, cold water paints, steamed bone, and other such products which were reported by only one or two firms in this industry.

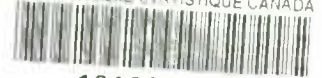
Adhesives

Table 9 - TOTAL PRODUCTION OF ADHESIVES IN CANADA, FROM ALL INDUSTRIES, 1946 and 1947

| | Unit of measure | 1946 | | 1947 | |
|------------------------|-----------------|------------|------------------------------|------------|------------------------------|
| | | Quantity | Selling value at works \$ | Quantity | Selling value at works \$ |
| Cements - Linoleum .. | lb. | 1,814,790 | 95,895 | 2,230,276 | 133,432 |
| Rubber | gal. | ... | 226,429 | 180,543 | 252,908 |
| Other | ... | ... | 339,818 | ... | 301,929 |
| Glue - Bone and hide.. | lb. | 5,224,629 | 1,081,705 | 5,802,196 | 1,557,285 |
| Casein | lb. | 1,085,248 | 257,881 | 731,838 | 200,049 |
| Flexible | lb. | 1,235,638 | 228,415 | 1,116,738 | 217,718 |
| Fish | ... | ... | 297,586 | ... | 269,583 |
| Synthetic resin | lb. | 7,288,511 | 769,024 | 7,239,294 | 729,672 |
| Vegetable - | | | | | |
| Dry | lb. | 2,668,283 | 206,407 | 3,638,631 | 320,476 |
| Liquid | lb. | 17,979,398 | 1,276,163 | 17,724,886 | 1,289,565 |
| Other | lb. | 2,921,430 | 229,380 | ... | 200,464 |
| Mucilage and paste ... | ... | ... | 537,011 | ... | 500,055 |
| Adhesives, other | ... | ... | 252,550 | ... | 128,553 |
| TOTAL | ... | ... | 5,798,264 | ... | 6,101,689 |

Table 10 - IMPORTS OF ADHESIVES INTO CANADA, 1946 and 1947

| | 1946 | | 1947 | |
|-----------------------------|-----------|---------|-----------|-----------|
| | Pounds | \$ | Pounds | \$ |
| Glue - Animal | 3,653,968 | 651,379 | 4,478,037 | 1,098,459 |
| Synthetic resin | 396,365 | 80,063 | 602,221 | 140,154 |
| Vegetable | 65,960 | 6,879 | 156,753 | 23,688 |
| Other | 387,751 | 118,479 | 225,227 | 67,000 |
| Mucilage and adhesive paste | 267,469 | 42,251 | 304,302 | ... |
| Rubber cement | ... | 373,196 | ... | ... |



LIST OF FIRMS IN THE ADHESIVES INDUSTRY, 1947

| Name of Firm | Location of Plant |
|---|---------------------------------------|
| <u>Quebec -</u> | |
| B. B. Chemical Co. of Canada Limited | 2610 Bennet Ave., Montreal |
| Canadian Adhesives Ltd. | 2104 Aird Ave., Montreal |
| Consolidated Tanneries Ltd. | 3 Courcellette St., Quebec |
| Dominion Flour Paste Co., The | 2135 Maisonneuve, Montreal |
| Laucks (Eastern) Ltd. | Stanbridge |
| Le Page's Inc. | 6892 Notre Dame St. E., Montreal |
| Meredith, Simmons & Co. Ltd. | 5565 Cote St. Paul Road, Montreal |
| Solidex Limited | 50 Hurtubise Blvd., Montreal East |
| <u>Ontario -</u> | |
| Butterworth, A. C. | 103 Oak Crest Ave., Toronto |
| Canada Glue Co. Limited | Mohawk Road, Brantford |
| Cann, Lew., Sales | Streetsville |
| Delany & Pettit Limited | 133 Jefferson Ave., Toronto |
| Dominion Starch Products, Limited | 119 Water St., Brockville |
| Harris, W., & Co. Limited | 200 Keating St., Toronto |
| Industrial Adhesives Ltd. | 1255 College St., Toronto |
| Industrial Grain Products, Limited | 741 Talbot St., London |
| Machon Sealing Wax Company, The | 678 Parliament St., Toronto |
| McCleary, Allan K & Co. | 17 Carlaw Ave., Toronto |
| McCormick & Co. (Canada) Limited | 218 Front St. W., Toronto |
| Meredith Simmons & Co. Limited | 363-379 Wallace Ave., Toronto |
| Perkins Glue Company of Canada, Limited | 629 Queen St. S., Kitchener |
| Stuart & Foster Limited | 361 King St. E., Toronto |
| Stein-Hall Limited | 1130 Dupont St., Toronto |
| Wolverine Cement Company | 200 Grand River Ave., Brantford |
| <u>British Columbia -</u> | |
| Laucks, I. F., Ltd. | Granville Island, Vancouver |
| Hasco Products Limited | 13th Ave. & Kingsway, New Westminster |