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## ANIUUAL INDUSTRY REPORT - CHENTCALS AND ALLIED PRODUCTS GROUP

## TIE ADHESIVES INDUSTRY, 1958

Statistics in this report on the Adhesives Industry cbver only those factories which make glue, mucllage or paste as their chief product. During 1938 there were nineteen firmis operating in this group, 10 being located in Ontario, 7 in Quebec and 2 in British Columbia.

Production and employment in the industry remained steady during 1938 compared with 1937, the value of production being reported at $\$ 1,904,258$ compared With $\$ 1,904,137$ in the previous year, and employment at 415 against 416. Capital investment rose 9.4 per cent to $\$ 2,580,263$, expenditures for salaries and wages increased 2.7 per cent to $\$ 496,950$, but the cost of materials purchased for use in manufacturing operations dropped 5.6 per cent to $\$ 851,529$.

Production of bone and hide glue increased in quantity to 2,530 tons from 2,468 tons but the value declined to $\$ 754,867$ from $\$ 802,572$. Output of other glues advanced in value to $\$ 611,032$, from $\$ 548,129$, and the value of mucilage and paste increased to $\$ 120,099$ from $\$ 109,356$. Mucilage and paste were made also by concerns in other industries, particularly by the manufacturers of writing inks, the total production from all sources amounting to about \$202,000 in 1938 against $\$ 182,000$ in 1937.

Imports of adhesives into Canada during 1938 were as folloms: 575 tons of vegetable glues volued at $\$ 38,373 ; 654$ tons of animal glue at $\$ 130,369$; 88 tons of liquid glue at $\$ 31,608$; and 80 tons of mucilage and paste at $\$ 18,906$.

Exports of glue amounted to 100 tons et $\$ 33,763$ and exports of glue stock totalled 1,070 tons appraised at $\$ 22,995$.

Table 1 - PRINCIPAL STATISTICS OF THE ADHESIVES INDUSTRY $1923=1938$

| Years | Number of plants | Capitel employed | Average number of employees | Selaries and Mages | Cost of fuel and electricity at morks | Cost of materials at works | Gross selling value of products at morks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ |  | \$ | \$ | \$ | \% |
| 1929 | 13 | 1,850,273 | 267 | 321,296 | 68,157 | 962,940 | 1,830,644 |
| 1930 | 12 | 1,921,406 | 226 | 286,825 | 64,380 | 882,908 | 1,650,634 |
| 1931 | 13 | 2,850,507 | 297 | 375,598 | 75,149 | 877,802 | 1,742,553 |
| 1932 | 14 | 2,501,171 | 229 | 263,142 | 53,300 | 457,146 | 1,087,215 |
| 1933 | 16 | 2,271,071 | 283 | 314,005 | 78,712 | 463,199 | 1,141,761 |
| 1934 | 16 | 2,125,205 | 332 | 366,008 | 77,198 | 587,535 | 1,307,393 |
| 1935 | 17 | 2,066,754 | 589 | 423,513 | 114,604 | 550,700 | 1,436,259 |
| 1936 | 19 | 2,266,199 | 420 | 457,170 | 123,865 | 813,291 | 1,799,200 |
| 1937 | 18 | 2,357,662 | 416 | 483,819 | 116,842 | 901,194 | 1,904,137 |
| 1938 | 19 | 2,580,263 | 415 | 496,950 | 115,972 | 851,529 | 1,904,258 |
| Per cent change |  |  |  |  |  |  |  |
| 1938 |  | +9.4 | -0.2 | tru 7 | -0.7 | -5.5 | +0.0. |

NOTE - Profits or losses cannot be calculated from above figures as data are not available for general expense items such as interest, rent, depreciation, taxes, insurance, advertising, etc.

Table 2 - PRINCIPAL STATISTICS, BY PPOVINCFS, 1937 and 1938

| Years | Number of plants | Capitel employed | Average number of ployees | Salaries and Figes | Cōst of fuel and electricity at morks | Cost of materials at works | Gross selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ |  | \$ | ¢ | \$ | \$ |
| Quebec |  |  |  |  |  |  |  |
| British Columbia | 2) | 652,482 | 133 | 136,204 | 26;746 | 286;484 | 645;826 |
| Ontario | 9 | 1,705,180 | 283 | 347,615 | 90,096 | 614,710 | 1,258,311 |
| CANADA | 18 | 2,357,662 | 416 | 483,819 | 116,842 | 901,194 | 1,904,137 |

1938

| Quebec......... British Columbia | $\begin{aligned} & \text { 7) } \\ & \text { 2) } \end{aligned}$ | 629,963 | 15 | 142,567 | 28,700 | 308,903 | 591,250 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Onterio | 10 | 1,950,300 | 284 | 354,583 | 87.272 | 542,626 | 1,313,008 |
| CANADA | 19 | 2,580,263 | 415 | 496,950 | 115,972 | 851,529 | 1,904,258 |

Table 3 - CAPITAL PPPLOYED, BY PROVINCES, 1937 and 1938
Inventory value of
Present value materials, finished of lands, build- products, fuel and Operating ings, machinery other supplies on and equipment hand, and stocks in capital (cash, TOTAL
Provinces
process

CAPITAL accounts re- ERPLOYED ceivable, etc.)

|  | \% | \$ | \$ | \$ |
| :---: | :---: | :---: | :---: | :---: |
| 1937 ( 1 |  |  |  |  |
| Quebec .........) <br> British Columbia) | 309,035 | 158,706 | 184,741 | 652,482 |
| Ontario ....... | 848,284 | 615,045 | 241,851 | 1,705,180 |
| CANADA | 1,157,319 | 773,751 | 426,592 | 2,357,662 |

Table 3 - CAPITAL PMPLOYED, BY PROVINCES, 1937 end 1938 (Concluded)
Inventory value of

Present value of lands, buildings, machinery and equipment
materials, finished products, fuel and other supplies on hand, and stocks in process

1938
Quebec.........)
British Columbia)
Ontario
CANADA ....

315,712
$1,009,364$
1,325,076

Table 4 - SIZE OF ESTABLISHMENTS ACCORDING TO PRODUCTION, NUMBER OF EMPLOYEES AND

167,198
594, 565
761,763
-
Operating
capital (cash, TOTAL
bills and
accounts re- EAPITAL

Operating bills and CAPITAL EMPLOYED CAPITAL EMPLOYED, 1938


Table 5 - MAPLOYEES, SALARIES AND WAGES, 1937 and 1938 AVERAGE NUSBER OF FIPLOYEES Salaxies Wages $\begin{gathered}\text { TOTAL } \\ \text { SALARIES } \\ \text { and WAGES }\end{gathered}$ Provinces $\quad \frac{\text { On Salaries On Nages }}{M a l e}$ Female Male Female TOTAL 1937

| Quebec $\ldots \ldots . .)$. | 30 | 9 | 83 | 11 | 133 | 63,510 | 72,694 | 136,204 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| British Columbia) | 40 | 12 | 228 | 3 | 283 | 107,171 | 240,444 | 347,615 |
| Ontarto $\ldots \ldots \ldots$ | 40 | 70 | 21 | 311 | 14 | 416 | 170,681 | 313,138 |

1938

| Quebec.........) <br> British Columbia) | 33 | 5 | 81 | 12 | 131 | 64,736 | 77,831 | 142,567 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ontario ....... | 43 | 14 | 224 | 3 | 284 | 123,223 | 231,160 | 354,383 |
| CANADA | 76 | 19 | 305 | 15 | 415 | 187,959 | 308,991 | 496,950 |

Table 6 - WAGE-EARNERS, BY MONTHS, 1957 and 1938 (On the last day of each month)

| Months | 1 | 93 | 7 | 1 | $9 \quad 3 \quad 8$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | TOTAL | Male | Female | TOTAL |
| January | 312 | 14 | 326 | 308 | 14 | 322 |
| February | 308 | 15 | 323 | 311 | 15 | 326 |
| March ... | 322 | 15 | 337 | 308 | 15 | 323 |
| April | 321 | 15 | 335 | 307 | 15 | 322 |
| May . | 321 | 15 | 336 | 312 | 14 | 326 |
| June . | 306 | 15 | 32.1 | 307 | 15 | 322 |
| July | 303 | 15 | 318 | 295 | 15 | 310 |
| August | 295 | 14 | 309 | 299 | 16 | 315 |
| September | 312 | 14 | 326 | 283 | 17 | 300 |
| October | 304 | 15 | 319 | 299 | 15 | 314 |
| November | 307 | 15 | 32.2 | 314 | 15 | 329 |
| December | 323 | 14 | 337 | 308 | 14 | 322 |
|  | 311 | 14 | 325 | 305 | 15 | 320 |

Table 7 - FUEL AND ELECIRICITY USED, 1937 and 1938

| Kinds | Unit of measure | Quantity | $\begin{aligned} & \text { Cost at } \\ & \frac{\text { works }}{\phi} \end{aligned}$ | Quantity |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracite coel | short tons | 6 | 79 | 4 | 56 |
| Bituminous coal - Canadian | short tons | 2,174 | 11,418 | 2,109 | 12,920 |
| Foreign | short tons | 13,012 | 79,059 | 12,375 | 74,276 |
| Coke ...................... | short tons | 146 | 1,424 | 62 | 586 |
| Fuel oil | Imp. gal. | 155,053 | 6,450 | 210,178 | 8,917 |
| Wood ....................... | cords | 6 | 45 | 8 | 69 |
| Gas - Manufactured | M cu. ft. | 304 | 325 | 280 | 296 |
| Electricity purchased. | K. W. H. | 1,325,201 | 18,042 | 1,228,793 | 18,852 |
| TOTAL | \$ | ... | 116,842 | . . | 115,972 |

Table 8 - POWER EQUIPMENT, 1937 and 1938

|  | 1.9 | $3 \quad 7$ | 19 | 38 |
| :---: | :---: | :---: | :---: | :---: |
|  | Number of units | Total rated horse power | Number of units | Total rated horse power |
| Steam engines and steam turbines.. Hydraulic turbines and waterwheels | $\begin{aligned} & 8 \\ & 1 \end{aligned}$ | $\begin{array}{r} 705 \\ 25 \\ \hline \end{array}$ | $\begin{aligned} & 9 \\ & 1 \end{aligned}$ | $\begin{array}{r} 855 \\ 25 \end{array}$ |
| Total Primary Equipment | 9 | 730 | 10 | 880 |
| Electric motors run by purchased power | 148 | 1,316 | 179 | 1,743 |
| TOTAL . .......................... | 157 | 2,046 | 189 | 2,623 |
| Stationary boilers | 13 | 1,155 | 13 | 1,145 |

Table 9 - MATERIALS USED IN MANUFACTURING, 1937 and 1938

|  |  | 193 | 7 | 19 | 38 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Materials | Unit of measure | Quantity | Cost at works | Quantity | Cost at works |
|  |  |  | \$ |  | \$ |
| Bones | ton | 10,057 | 63,793 | 7,386 | 75,416 |
| Hides, hide trimmings and sinues | ton | 13,400 | 276,925 | 13,518 | 261,538 |
| Casein | 1 b . | 82,935 | 11,590 | 104,836 | 12,448 |
| Dextrine | 1 b . | 2,330,441 | 108,702 | 2,310,858 | 97,223 |
| Flour, taploca | 1b. ) |  |  | 233,542 | 11,363 |
| Flour, soya bean | 1b.) | 204,697 | 9,063 | 928,737 | 23,990 |
| Flour, other | 1 b . | 3,313,048 | 87,947 | 2,012,487 | 40,901 |
| Glycerine | 1 b . | 90,201 | 16,756 | 108,261 | 16,510 |
| Gums | 1 b . | 32,282 | 4,118 | 60,532 | 5,692 |
| Lime | ton | 728 | 5,782 | 662 | 5,787 |
| Resin | 1 b . | 80,267 | 3,872 | 74,066 | 3,542 |
| Rubber | 1b. | 22,164 | 4,791 | 27,666 | 5,872 |
| Solvents (benzol, naphtha, etc.) | gal. | 43,812 | 8,427 | 49,102 | 9,215 |
| Starch | 1 b . | 642,677 | 29,858 | 525,416 | 25,558 |
| Sulphur .......................... | 1 b . | 140,150 | 2,336 | 141,093 | 2,487 |
| Sulphuric acid, 660 Be ......... | 1 b 。 | 1,309,889 | 11,312 | 1,107,636 | 10,075 |
| Tallow and fat. | 1 b . | 1,712,762 | 17,824 | 1,732,061 | 13,677 |
| Containers and packing materials | ... | , ... | 66,512 | -.. | 55,927 |
| All other materials | ... | ... | 171,586 | ... | 174,308 |
| TOTAL | . $\cdot$ | ... | 901,194 | . | 851,529 |

Table 10 - PRODUCTS MADE, 1937 and 1938

|  |  | 19 | 37 | 19 | 38 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Products | Unit of measure | Quantity | Selling value at works | Quantity | Selling value at works |
|  |  |  | \$ |  | \$ |
| Bone and hide glue | 1 b . | 4,935,901 | 802,572 | 5,059,032 | 754,867 |
| Vegetable glue, dry and liquid | 1 b . | 6,932,875 | 393,524 | 8,074,458 | 436,228 |
| Other glues (casein, soya bean, flsh, flextble, etç.)....... | xxx |  | 154,605 | … | 174,804 |
| Grease . . . . . . . . . . . | 1 b . | 3,115,823 | 97,438 | 3,183,118 | 84,685 |
| Mucilage and paste (xx) ...... | x0x | ... | 109,856 | -.. | 120,099 |
| All other products (x) ....... | xxx | . . | 346,142 | ... | 333,575 |
| TOTAL . . . . . . . . . . . . . . . | \$ | ... | 1,904,137 | ... | 1,904,2.58 |

( $x \times$ ) In addition to the output here reported, there was some mucilage and paste made in other industries. The total output of mucilage and paste from all industries was about \$202,000 in 1938 compared vith $\$ 182,000$ in 1937.
(x) Includes liquid solder, sealing wax, mised fertilizers, buttermilk powder, rubber and linoleum cements, poultry food, fox food, raw bone, steamed bone, and other such products which were reported by only one or two firms in this industry.

Table 11 - IMPORTS INTO CANADA AND EXPORTS OF GLUE, MUCILAGE AND PASTE, 1937 and 1938

(a) IMPORTS

Glue, vegetable -
TOTAL IMPORTS
From United Kingdom ...

| $2,813,415$ | 75,903 | $1,149,690$ | 38,373 |
| ---: | ---: | ---: | ---: |
| 4,721 | 406 | 24,690 | 1,103 |
| 574,079 | 26,350 | 531,514 | 27,806 |

Mucilage and adhesive paste -
TOTAL IMPORTS
From United Kingdom. United States ....
Glue, animal, powdered or sheet -
TOTAL IMPORTS ................
From United Kingdom ...
United States ....
TOTAL IMPORTS ................
From United Kingdom ...
United States ....
TOTAL IMPORTS ................
From United Kingdom ...
United States ....

| 208,195 | 27,020 | 160,437 | 18,906 |
| ---: | ---: | ---: | ---: |
| 36,835 | 7,153 | 31,893 | 5,963 |
| 170,373 | 19,805 | 128,452 | 12,323 |


| $2,270,047$ | 218,865 | $1,308,994$ | 130,369 |
| ---: | ---: | ---: | ---: |
| $1,866,226$ | 167,618 | 975,788 | 94,851 |
| 239,913 | 37,713 | 187,455 | 24,931 |

Glue, liquid -
TOTAL IMPORTS

| 159,576 | 33,155 | 175,112 | 31,608 |
| ---: | ---: | ---: | ---: |
| 89,123 | 17,578 | 105,461 | 18,090 |
| 70,255 | 15,432 | 69,285 | 13,369 |

(b) EXPORTS

Glue -
momat myponts
To United Kingdon ..... United States ......

| 104,500 | 19,482 | 199,700 | 33,763 |
| ---: | ---: | ---: | ---: |
| 89,300 | 16,050 | 159,800 | 28,177 |
| 2,000 | 181 | 16,900 | 924 |

Glue Stock -
TOTAL EXPORTS

| $5,748,100$ | 72,738 | $2,140,900$ | 22,995 |
| ---: | ---: | ---: | ---: |
| $5,743,100$ | 72,733 | $2,140,500$ | 22,984 |

## DIRECIORY OF FIRMS IN THE ADHESIVES INDUSTRY, 1938

NOTE - The Adhesives Industry includes only the concerns which made adhesives as their main products. Some concems in other industrial groups made paste, mucilage, etc., as minor products but these works are not listed in this directory.
Name of Firm and
Location of Plant
Main Products, 1938

Boston Blacking Co. of Canada, Limited 1505 Cabot St., Cote.St. Paul,
Montreal, P.Q.
Bulldog Grip Cement Co. Inc.,
2101 Bennett Ave., Montreal, P.Q.
Butterworth, A. \& Son, Butterworth Ave., Scarboro, Ont.

Canada Glue Co. Limited,
Mohawk Road, Brantford, Ont.

Rubber cement; coated cotton duck.

Cascin glue; buttermilk powder; casein; dry and liquid paste.

Nitro-cellulose, cement and solvent.

Bone and hide glue; grease; steamed bone; raw bone meal.

## DIRECTORY OF FIRMS IN THE ADHESIVES INDUSTRY, 1938

 (Concluded)| Name of Firm and Location of Plant | Main Products - 1938 |
| :---: | :---: |
| Dominion Flour Paste Co., $2122 \frac{1}{2}$ Champlain St., Montreal, P.Q. | Size and liquid glue and paste. |
| Gypsum, Lime \& Alabastine, Canada, Ltd., 1 Strange St., Kitchener, Ont. | Hide glue; grease. |
| Harris, W., \& Co. Limited, 200 Keating St., Toronto 2, Ont. | Bone and hide glue; grease; tankage; fox food; poultry food; hides; tallow; fertilizers. |
| Hasco Products Limited, 131-8th St., New Westminster, B.C. | Marine glue. |
| $\begin{aligned} & \text { Hercules Laux-Merritt Co. Ltd., } \\ & \text { Stanbridge, P.Q. } \end{aligned}$ | Casein clue; size. |
| Laucks, I. F., Ltd. <br> Granville Island, Vancouver, B.C. | Casein and dry vegetable glues; casein paints; symthetic resin sealers; premixes for adhesives. |
| Machon Sealing Wax Co., 678 Parliament St., Toronto, Ont. | Sealing wax. |
| Marquis, F. Canac, Reg'd. <br> 3 Courcelette St., Quebec, P.Q. | Bone and hide glue; grease and tallow; fertilizers. |
| Meredith, Simmons \& Co. Limited, 5565 Cote St. Paul Road, Montreal, P.Q. and | Liquid and dry vegetable glue; size; bone and hide glue; liquid and dry paste; flexible glues. |
| 371 Wallace Ave., Toronto, Ont. |  |
| Metalite Products, 347 Main St., Toronto, Ont. | Liquid solder and transparent cement. |
| Reanite Corporation Ltd. Hilton St., Eastview, Ont. | Rubber cement, latexed goods, paints. |
| Russia Cement Co., 4105 Richelieu St., Montreal, P.Q. | Paste and mucilage; liquid solder; fish glue. |
| Stuart \& Foster, Linited, 361 King St. E., Toronto, Ont. | Vegetable glue; paste; size; casein glue; mucilage; binders. |
| Toronto Adhesive Co., 27 Jarvis St., Toronto, Ont. | Liquid vegetable glue; laminated board; flexible glue. |
| Wolverine Cement Co., <br> 99 Grand River Ave., Brantford, Ont. | Linoleum cements. |

