

68.3  
46  
1951

46-203 CB

Canada.

DOMINION BUREAU OF STATISTICS—DEPARTMENT OF TRADE AND COMMERCE  
CANADA



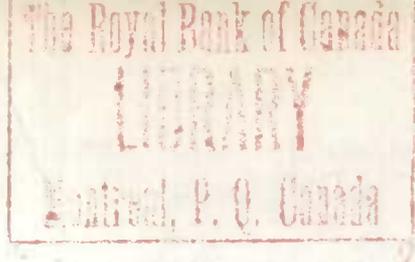
# THE ADHESIVES INDUSTRY

1951

*Published by*  
Authority of the Rt. Hon. C. D. Howe  
Minister of Trade and Commerce

Prepared in the Mining, Metallurgical and Chemical Section  
Industry and Merchandising Division  
Dominion Bureau of Statistics  
Ottawa

668.3



805-1716  
D  
1951

### NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 4 volumes, as follows: **Volume I**—The Primary Industries, including mining, forestry and fisheries; **Volume II**—Manufacturing; **Volume III**—Construction; **Volume IV**—Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries which they comprise.

Volume II consists of the following parts, the first two of which deal with manufacturing as a whole and the balance with the major manufacturing groups.

- I—General Review of the Manufacturing Industries, \$1.50.
- II—The Manufacturing Industries, by Provinces
  - Section 1. Principal Statistics of Major Industrial Groups and Leading Industries, 50¢.
  - Section 2. Principal Statistics of Individual Industries, 75¢.
  - Section 3. Principal Statistics by Regional Distribution, 75¢.
- III—Foods and Beverages
- IV—Tobacco and Tobacco Products
- V—Rubber Products
- VI—Leather Products
- VII—Textiles
- VIII—Wood and Paper Products
- IX—Printing Trades
- X—Iron and Steel Products
- XI—Transportation Equipment
- XII—Non-ferrous Metal Products
- XIII—Electrical Apparatus and Supplies
- XIV—Non-metallic Mineral Products
- XV—Products of Petroleum and Coal
- XVI—Chemicals and Allied Products
- XVII—Miscellaneous Manufactures

The present report belongs in Part XVI, Chemicals and Allied Products. It is punched to permit of filing in a ring binder along with others of the group. The reports in this group are:

- A—General Review, 25¢.
- B—The Acids, Alkalies and Salts Industry, 25¢.
- C—The Fertilizer Manufacturing Industry, 25¢.
- D—The Fertilizer Trade in Canada, 25¢.
- E—The Medicinal and Pharmaceutical Preparations Industry, 25¢.
- F—The Paints, Varnishes and Lacquers Industry, 25¢.
- G—The Primary Plastics Industry, 25¢.
- H—The Soaps, Washing Compounds and Cleaning Preparations Industry, 25¢.
- I—The Toilet Preparations Industry, 25¢.
- J—The Vegetable Oils Industry, 25¢.
- K—The Inks Industry, 25¢.
- L—The Adhesives Industry, 25¢.
- M—The Polishes and Dressings Industry, 25¢.
- N—The Compressed Gases Industry, 25¢.
- O—The Coal Tar Distillation Industry, 25¢.
- P—The Miscellaneous Chemical Products Industry, 25¢.

(2 Apr. 52)

# THE ADHESIVES INDUSTRY

## 1951

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 1951 there were 29 establishments in this group, 16 being located in Ontario, 9 in Quebec, 3 in British Columbia and 1 in Manitoba.

Production by firms in the Adhesives Industry was valued at \$11,437,037 in 1951, an increase of 18.2 per cent over the 1950 total of \$9,679,396. The number of employees increased 6.7 per cent to 714 while salaries and wages at \$1,971,906 were up 14.4 per cent from the \$1,723,015 paid in 1950. The cost of fuel and electricity at \$369,465 was higher by 1.3 per cent than in 1950 and the value of

materials used direct in manufacturing processes was 23.5 per cent higher at \$6,280,084.

Output of adhesives during 1951, including small amounts from other industries, was as follows: linoleum cement, 11,971,000 pounds at \$606,000; rubber cement, 393,000 gallons at \$893,000; bone and hide glue, 8,542,000 pounds at \$2,665,000; casein glue, 871,000 pounds at \$290,000; flexible glue, 1,949,000 pounds at \$505,000; fish glue, 1,482,000 pounds at \$400,000; synthetic resin glue, 14,802,000 pounds at \$1,931,000; vegetable glues, 18,612,000 pounds at \$1,969,000; mucilage and paste valued at \$753,000 and miscellaneous adhesives, including mucilage and paste, was \$10,924,000 in 1951 compared with \$9,130,000 in 1950 and \$7,681,000 in 1949.

**TABLE 1. Principal Statistics of the Adhesives Industry, 1947-1951**

Year	Number of plants	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	Net <sup>1</sup> value of production
			\$	\$	\$	\$	\$
1947 .....	26	729	1,551,084	274,789	4,303,021	7,415,610	2,837,800
1948 .....	25	771	1,829,603	356,191	4,701,297	8,660,211	3,602,723
1949 .....	25	749	1,727,848	339,839	4,218,359	7,824,564	3,266,366
1950 .....	28	669	1,723,015	364,849	5,086,086	9,679,396	4,228,461
1951 .....	29	714	1,971,906	369,465	6,280,084	11,437,037	4,787,488
Per cent change 1951 from 1950	—	+6.7	+14.4	+1.3	+23.5	+18.2	+13.2

1. Gross value less cost of materials, fuel and electricity.

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.

**TABLE 2. Principal Statistics, by Provinces, 1950 and 1951**

Province	Number of plants	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
			\$	\$	\$	\$
1950						
Quebec .....	9	200	461,528	46,105	1,796,373	3,039,740
Ontario .....	16	415	1,112,571	308,825	2,754,883	5,725,560
British Columbia .....	2	54	148,916	9,919	534,830	914,096
Manitoba .....	1					
<b>Canada</b> .....	<b>28</b>	<b>669</b>	<b>1,723,015</b>	<b>364,849</b>	<b>5,086,086</b>	<b>9,679,396</b>
1951						
Quebec .....	9	177	462,700	55,877	1,808,382	3,055,195
Ontario .....	16	492	1,385,674	305,404	3,861,722	7,330,280
British Columbia .....	3	45	123,532	8,184	609,980	1,051,562
Manitoba .....	1					
<b>Canada</b> .....	<b>29</b>	<b>714</b>	<b>1,971,906</b>	<b>369,465</b>	<b>6,280,084</b>	<b>11,437,037</b>

TABLE 3. Products Made in the Adhesives Industry, 1950 and 1951

Product	1950		1951	
	Quantity	Selling value at works	Quantity	Selling value at works
	lb.	\$	lb.	\$
<b>Cement:</b>				
Linoleum .....	4,702,540	288,252	5,239,540	354,713
Other (rubber, etc) .....	—	318,031	—	341,992
<b>Glue:</b>				
Bone and hide .....	8,152,676	2,206,505	8,541,868	2,664,870
Casein .....	965,852	241,868	871,496	290,348
Flexible .....	2,020,167	479,345	1,948,717	504,621
Synthetic resin .....	11,656,797	1,320,318	13,159,685	1,752,850
<b>Vegetable:</b>				
Dry .....	2,710,379	254,782	2,454,197	284,456
Liquid .....	16,983,354	1,556,159	16,157,470	1,684,592
Other .....	—	602,147	—	505,543
Mucilage and paste .....	6,287,447	589,138	6,439,434	640,235
All other products <sup>1</sup> .....	—	1,822,851	—	2,412,817
<b>Total</b> .....	—	<b>9,679,396</b>	—	<b>11,437,037</b>

1. Includes sealing wax, grease, tallow, tankage, blended starches, dextrines, steamed bone and other such products which were reported by only one or two firms in this industry.

TABLE 4. Materials Used in the Adhesives Industry, 1950 and 1951

Material	1950		1951	
	Quantity	Cost at works	Quantity	Cost at works
		\$		\$
Alcohol, ethyl, denatured or not (including tax) ..... imp. gal.	39,117	35,217	34,157	44,000
Bones ..... tons	13,475	644,539	13,917	799,830
Borax ..... lb.	753,234	32,265	910,734	35,371
Hides and hide trimmings ..... tons	19,036	472,149	21,352	610,337
Casein ..... lb.	733,552	176,903	652,493	213,084
China clay ..... lb.	1,392,563	18,597	1,098,380	17,139
Dextrine ..... lb.	8,287,358	694,716	8,192,603	813,376

TABLE 4. Materials Used in the Adhesives Industry, 1950 and 1951 - Concluded

Material	1950		1951	
	Quantity	Cost at works	Quantity	Cost at works
		\$		\$
Flour:				
Potato .....	lb. 405,832	28,544	281,990	23,423
Soya bean .....	" 656,914	41,229	332,758	20,386
Tapioca .....	" 720,103	71,510	830,846	79,382
Wheat .....	" 5,806,334	234,361	5,496,204	234,017
Other .....	" 1,415,041	99,536	824,766	65,060
Formaldehyde .....	" 7,555,912	318,081	9,080,773	411,842
Glucose .....	" 524,498	40,830	545,462	46,686
Glue:				
Bone and hide .....	lb. 613,471	170,514	698,355	214,271
Fish .....	" 61,838	13,428	1,004,430	104,667
Glycerine .....	" 212,215	77,014	109,032	60,460
Gums and resins, natural:				
Arabic .....	lb. 180,124	25,756	192,607	29,775
Tragacanth .....	" 1,680	983	—	—
Other .....	" 354,692	37,395	494,620	63,952
Lignin liquor .....	Imp. gal. 1	1	345,106	34,043
Lime .....	tons 641	9,157	724	10,352
Phenol .....	lb. 1,972,757	293,480	2,021,033	378,263
Resins, synthetic .....	" 598,710	134,746	969,351	278,062
Rubber or latex .....	" 464,422	147,089	427,699	172,736
Sodium fluoride .....	" 41,910	5,394	36,639	4,849
Sodium hydroxide (caustic soda) .....	" 1,105,736	33,131	1,064,525	26,147
Solvents (benzol, naphtha, etc.) .....	imp. gal. 192,954	57,083	226,417	73,945
Starch, corn .....	lb. 1,170,869	75,587	876,186	68,993
Sulphur .....	" 189,320	2,629	151,910	2,266
Sulphuric acid (100%) .....	" 1,374,167	14,803	1,436,427	18,244
Tallow and fat .....	" 3,777,199	105,892	5,559,342	176,874
Urea, crystal .....	" 2,113,726	138,957	2,457,701	160,244
Whiting .....	" 25,080	2,235	35,503	2,138
Zinc sulphate .....	" 287,421	17,939	251,604	22,531
Containers and packing materials .....	—	306,648	—	461,143
All other materials .....	—	507,749	—	502,196
<b>Total</b> .....	—	<b>5,086,086</b>	—	<b>6,280,084</b>

1. Not classified separately in 1950.

TABLE 5. Total Production of Adhesives, From All Industries, 1950 and 1951

Item	1950		1951	
	Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$
Cement:				
Linoleum ..... lb.	5,803,000	324,000	11,971,000	606,000
Rubber ..... gal.	348,000	575,000	393,000	893,000
Other .....	—	147,000	—	161,000
Glue:				
Bone and hide ..... lb.	8,153,000	2,207,000	8,542,000	2,665,000
Casein ..... lb.	966,000	242,000	871,000	290,000
Flexible ..... lb.	2,020,000	479,000	1,949,000	505,000
Fish ..... lb.	—	418,000	1,482,000	400,000
Synthetic resin ..... lb.	12,330,000	1,402,000	14,802,000	1,931,000
Vegetable:				
Dry ..... lb.	2,710,000	255,000	2,455,000	284,000
Liquid ..... lb.	16,983,000	1,556,000	16,157,000	1,685,000
Other .....	—	222,000	—	175,000
Mucilage and paste .....	—	698,000	—	753,000
Adhesives, other .....	—	605,000	—	576,000
<b>Total .....</b>	<b>—</b>	<b>9,130,000</b>	<b>—</b>	<b>10,924,000</b>

TABLE 6. Imports of Adhesives, 1950 and 1951

Item	1950		1951	
	Pounds	\$	Pounds	\$
Glue:				
Animal .....	3,084,492	376,050	3,023,227	407,504
Synthetic resin .....	582,170	165,349	912,048	255,797
Vegetable .....	21,004	3,066	93,804	9,496
Other .....	297,484	88,326	207,699	67,009
Mucilage and adhesive paste .....	247,688	50,433	301,109	65,316
Rubber cement .....	—	803,271	—	857,575

TABLE 7. Employees and Their Earnings in the Adhesives Industry, 1950 and 1951

Province	Number of employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
						\$	\$	\$
<b>1950</b>								
Quebec .....	43	28	104	25	200	169,591	291,937	461,528
Ontario .....	75	39	290	11	415	396,989	715,582	1,112,571
Manitoba and British Columbia .....	21	7	26	—	54	64,695	84,221	148,916
<b>Canada .....</b>	<b>139</b>	<b>74</b>	<b>420</b>	<b>36</b>	<b>669</b>	<b>631,275</b>	<b>1,091,740</b>	<b>1,723,015</b>
<b>1951</b>								
Quebec .....	43	25	107	2	177	172,582	290,118	462,700
Ontario .....	80	47	325	40	492	471,128	914,546	1,385,674
Manitoba and British Columbia .....	16	7	22	—	45	57,204	66,328	123,532
<b>Canada .....</b>	<b>139</b>	<b>79</b>	<b>454</b>	<b>42</b>	<b>714</b>	<b>700,914</b>	<b>1,270,992</b>	<b>1,971,906</b>

## List of Firms in the Adhesives Industry, 1951

Name	Address
<b>Quebec</b>	
B.B. Chemical Co. of Canada Limited .....	2610 Bennet Ave., Montreal
Canadian Adhesives Ltd. ....	2104 Aird Ave., Montreal
Dominion Flour Paste Co., The .....	2135 Maisonneuve, Montreal
Dural Products Ltd. ....	41 Dollard Ave., Dorval
Industrial Adhesives Ltd. ....	121 Bois Franc Rd., Ville St. Laurent
Monsanto (Canada) Limited .....	425 St. Patrick St., Ville LaSalle
National Adhesives (Canada) Limited .....	2125 Remembrance Road, Lachine
Swift Canadian Co. Ltd. ....	215 Maguire St., Montreal
Wolverine Products & Sales Limited .....	1501 Bercy St., Montreal
<b>Ontario:</b>	
Canada Glue Co. Limited .....	Mohawk Road, Brantford
Cann Llew Sales .....	Streetsville
Continental Chemical Company .....	859 Eastern Ave., Toronto
Delany & Petit 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
Le Page's Inc. ....	404 Kipling Ave., Toronto
Machon Sealing Wax Company, The .....	678 Parliament St., Toronto
McCormick & Co. (Canada) Limited .....	454 King St. W., Toronto
National Adhesives (Canada) 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
Swift Canadian Co. Ltd. ....	1960 St. Clair Ave. W., Toronto
Wolverine Cement Company .....	200 Grand River Ave., Brantford
<b>Manitoba:</b>	
Swift Canadian Co. Ltd. ....	Archibald St., St. Boniface
<b>British Columbia:</b>	
Hasco Products Limited .....	11th Avenue, New Westminster
Monsanto (Canada) Limited .....	Granville Island, Vancouver
Swift Canadian Co. Ltd. ....	Brunette St., New Westminster

STATISTICS CANADA LIBRARY  
BIBLIOTHÈQUE STATISTIQUE CANADA



1010681740