

46-203



THE ADHESIVES INDUSTRY

1953

Published by Authority of
The Right Honourable C. D. Howe, Minister of Trade and Commerce

DOMINION BUREAU OF STATISTICS
Industry and Merchandising Division
Metal and Chemical Products Section

6512-020
17-12-54

Price 25 cents

Vol. 2—Part XVI—I. 1

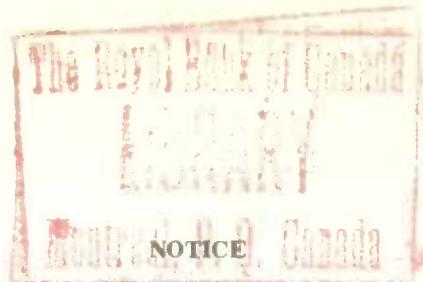
EDMOND CLOUTIER, C.M.G., O.A., D.S.P., Queen's Printer and Controller of Stationery, Ottawa, 1954.

668.3.

805-3416

D

1953.



The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: Volume I — The Primary Industries, including mining, forestry and fisheries; Volume II — Manufacturing; Volume III — Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries or provinces 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 of Canada, (7 sections, as follows:)
 - Section A. Summary for Canada, 25¢
 - Section B. Atlantic Provinces, 25¢
 - Section C. Quebec, 25¢
 - Section D. Ontario, 25¢
 - Section E. Prairie Provinces, 25¢
 - Section F. British Columbia, 25¢
 - Section G. The Manufacturing Industries of Canada,
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 Fertilizers 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¢

THE ADHESIVES INDUSTRY

1953

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 1953 there were 29 establishments in this group, 15 being located in Ontario, 10 in Quebec, 3 in British Columbia and 1 in Manitoba.

Factory shipments by firms in the Adhesives Industry were valued at \$12,082,115 in 1953, an increase of 11.5 per cent over the 1952 total of \$10,838,879. The number of employees remained practically unchanged at 707, while salaries and wages at \$2,144,997 advanced slightly over the \$2,128,897 paid in 1952. The cost of fuel and electricity at \$403,118 was higher by 9.7 per cent than in 1952 and the value of materials used directly

in manufacturing processes was 6.3 per cent higher at \$6,490,797.

Output of adhesives during 1953, including small amounts from other industries, was as follows: linoleum cement, 12,860,000 pounds at \$710,000; rubber cement, 699,000 gallons at \$1,523,000; bone and hide glue, 6,918,000 pounds at \$2,085,000; casein glue, 866,000 pounds at \$260,000; flexible glue, 2,379,000 pounds at \$574,000; fish glue, 1,447,000 pounds at \$412,000; synthetic resin glue, 22,629,000 pounds at \$2,858,000; vegetable glues, 19,797,000 pounds at \$2,174,000; mucilage and paste valued at \$790,000 and miscellaneous adhesives at \$1,031,000. The total value of all adhesives, including mucilage and paste, was \$12,317,000 in 1953, compared with \$11,283,000 in 1952 and \$10,924,000 in 1951.

TABLE 1. Principal Statistics of the Adhesives Industry, 1949-1953

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
1949	25	749	\$ 1,727,848	\$ 339,839	\$ 4,218,359	\$ 7,824,564
1950	28	669	1,723,015	364,849	5,086,086	9,679,396
1951	29	714	1,971,906	369,465	6,280,084	11,437,037
1952	30	706	2,128,897	367,382	6,106,121	10,838,879 ¹
1953	29	707	2,144,997	403,118	6,490,797	12,082,115 ¹
Per cent change, 1953 from 1952	-	-	+ 0.8	+ 9.7	+ 6.3	+ 11.5

1. Factory shipments since 1952. The inventory value of finished products at plant at end of 1952 amounted to \$1,496,000 and at end of 1953 to \$1,585,000.

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, 1952 and 1953

Province	Number of plants	Number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Value of factory shipments
1952			\$	\$	\$	\$
Quebec	9	147	398,473	39,224	2,009,085	3,078,102
Ontario	16	514	1,604,057	319,664	3,348,737	6,592,443
British Columbia	4	45	126,367	8,494	748,299	1,168,334
Manitoba	1					
Canada	30	706	2,128,897	367,382	6,106,121	10,838,879
1953			\$	\$	\$	\$
Quebec	10	137	373,871	47,427	1,943,856	3,166,263
Ontario	15	493	1,593,731	345,875	3,660,551	7,449,619
British Columbia	3	77	177,395	9,816	886,390	1,466,233
Manitoba	1					
Canada	29	707	2,144,997	403,118	6,490,797	12,082,115

TABLE 3. Products Made in the Adhesives Industry, 1952 and 1953

Product	1952		1953	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
	lb.	\$	lb.	\$
Cement:				
Linoleum	6,599,430	437,383	6,926,710	447,577
Other (rubber, etc.)	—	390,357	—	386,309
Glue:				
Bone and hide	5,139,554	1,665,703	6,918,316	2,035,001
Casein	861,386	260,177	865,578	230,141
Flexible	2,083,501	509,060	2,378,926	574,437
Synthetic resin	16,400,681	2,058,749	21,396,542	2,653,157
Vegetable:				
Dry	2,231,032	261,181	2,026,523	225,175
Liquid	17,725,157	1,790,459	17,770,291	1,848,967
Other	—	683,631	—	622,035
Mucilage and paste	5,341,941	633,369	5,697,026	675,459
All other products ¹	—	2,148,810	—	2,303,857
Total	—	10,838,879	—	12,082,115

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, 1952 and 1953

Material	1952		1953	
	Quantity	Cost at works	Quantity	Cost at works
	lb.	\$	lb.	\$
Acid, hydrochloric (muriatic) 20° Bé	18,110	782	21,629	1,895
Acid, sulphuric (as 100%)	936,183	12,372	663,490	10,342
Alcohol, ethyl, denatured or not (including tax)	Imp. gal.	59,631	90,533	34,541
Alcohol, methyl	Imp. gal.	27,388	28,352	2,627
Bones	tons	442,469	16,703	759,732
Borax	lb.	42,149	761,659	29,695
Hides and hide trimmings	tons	486,577	19,391	377,460
Casein	lb.	159,550	694,505	137,843
China clay	lb.	23,941	1,553,603	17,643
Dextrine	lb.	810,665	7,134,126	715,952

TABLE 4. Materials Used in the Adhesives Industry, 1952 and 1953 — Concluded

Material	1952		1953		
	Quantity	Cost at works	Quantity	Cost at works	
		\$		\$	
Flour:					
Potato.....	lb.	43,829	4,355	270,962	22,929
Soyabean	"	503,124	34,469	449,422	32,465
Tapioca	"	583,074	67,325	669,928	103,059
Wheat	"	4,247,680	188,677	3,977,202	177,065
Other.....	"	707,367	45,013	711,497	43,028
Formaldehyde	"	9,672,684	372,305	11,813,285	452,838
Glucose	"	475,663	38,914	569,229	43,074
Glue:					
Bone and hide	lb.	686,887	194,389	948,481	285,802
Fish	"	1,597,886	230,296	1,272,250	162,224
Glycerine	"	83,514	32,147	91,688	37,307
Carna and resins, natural:					
Airbic	lb.	150,254	25,178	205,722	28,764
Other.....	"	117,836	14,458	102,445	11,021
Lignin liquor	Imp. gal.	343,085	52,261	328,494	37,275
Lime	tons	680	10,389	602	9,733
Phenol	lb.	2,376,652	467,676	2,852,766	534,577
Resins, synthetic	"	1,361,829	433,109	1,431,146	343,723
Rubber or latex	"	471,104	150,436	569,756	167,717
Sodium carbonate (soda ash).....	"	155,710	4,838	49,954	1,689
Sodium fluoride	"	53,299	7,291	37,610	4,747
Sodium hydroxide (caustic soda)	"	1,035,694	25,200	1,265,670	29,390
Solvents (benzol, naphtha, etc.)	Imp. gal.	169,029	106,685	226,141	187,905
Starch, corn	lb.	724,986	61,148	993,648	74,695
Sulphur	"	144,800	2,411	170,200	3,067
Tallow and fat	"	3,414,097	81,978	75,385	10,256
Urea, crystal	"	2,362,505	151,749	2,741,980	165,394
Whiting	"	63,587	2,545	88,162	2,062
Zinc sulphate	"	145,974	12,050	146,765	11,275
Containers and packing materials	—	—	411,394	—	615,368
All other materials	—	—	780,045	—	801,603
Total	—	—	6,106,121	—	6,490,797

TABLE 8. Capital and Repair Expenditures in the Adhesives Industry, 1949-1953

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures
	Construction	Machinery and equipment		Construction	Machinery and equipment		
\$'000							
1949	256	521	777	46	287	313	1,090
1950	131	550	681	42	225	267	948
1951	54	348	402	47	314	361	763
1952	241	233	474	47	268	315	789
1953 ¹	12	132	144	48	300	348	492

1. Preliminary.

TABLE 9. Fuel and Electricity Used¹ in the Adhesives Industry, 1948 and 1953

Kind	Unit of measure	1948		1953	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal — Canadian Imported	ton ton	301 27,160	\$ 3,788 254,012	86 23,473	\$ 1,446 239,077
Anthracite coal	ton	16	248	—	—
Coke	ton	111	1,898	406	6,844
Gasoline	Imp. gal.	39,258	13,061	59,194	20,624
Fuel oil	Imp. gal.	358,078	43,895	589,010	67,994
Wood	cord	8	59	17	158
Gas — Manufactured	M. cu. ft.	3,389	3,634	3,876	6,178
Other fuel	—	—	1,439	—	4,273
Electricity purchased	k.w.h.	3,931,684	34,157	5,478,630	56,524
Total	—	—	356,191	—	403,118
Electricity generated for own use	k.w.h.	726,160	—	1,200,000	—

1. Details shown in Tables 9 and 10 are collected only every five years; accordingly, data for intervening years are not available.

TABLE 10. Power Equipment¹, 1948 and 1953

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1948				
Steam engines and steam turbines	7	443	2	45
Gasoline, gas and oil engines, other than Diesel engines	—	—	1	5
Electric motors run by purchased power	417	2,543	60	142
Total	424	2,986	63	192
Boilers for power purposes only	11	1,749	—	—
Motor-generator sets	—	—	—	—
1953				
Steam engines and steam turbines	6	1,205	1	35
Electric motors run by purchased power	514	2,301	60	204
Total	520	3,506	61	239
Electric motors run by above primary units	118	734	6	91
Boilers for power purposes only	8	1,469	—	—
Motor-generator sets	—	—	—	—

1. See footnote to Table 9.

1010681745

List of Firms in the Adhesives Industry, 1953

Name	Address
Quebec:	
B.B. Chemical Co. of Canada	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
General Adhesives Limited	St. Janvier
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
Ontario:	
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
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
Manitoba:	
Swift Canadian Co. Ltd.	Archibald St., St. Boniface
British Columbia:	
McKenzie Linoleum Cement Co. Ltd.	505 East Georgia St., Vancouver
Monsanto (Canada) Limited	Granville Island, Vancouver
Swift Canadian Co. Ltd.	Brunette St., New Westminster