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Annual Industry Report

Chemicals and Allied Products Group

THE ADHESIVES INDUSTRY, 1945

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 1945 there were 20 establishments in this group, 13 being located in Ontario, 5 in Quebec and 2 in British Columbia.

Production declined 3.6 per cent in 1945 to \$5,422,488, the number of employees decreased 8.7 per cent to 576 and salaries and wages decreased 5.0 per cent to \$1,067,337. The cost of fuel and electricity at \$166,210 was less by 28.5 per cent than in 1944, and the value of materials used directly in manufacturing processes was 15.2 per cent lower at \$2,662,236.

The output of bone and hide glue declined to 2,089 tons worth \$843,957 from 2,347 tons at \$927,820 in 1944; vegetable glues decreased to 8,994 tons at \$1,148,998 from 9,563 tons at \$1,259,888 and other glues totalled 5,358 tons valued at \$1,124,001 as against 6,275 tons at \$1,344,732 in the previous year and the value of mucilage and paste decreased to \$343,401 from \$376,161 in 1944. Mucilage and paste were also made by concerns in other industries, particularly by the manufacturers of inks, and the total production from all sources amounted to \$448,860 in 1945 and to \$474,225 in 1944.

Table 1 - Principal Statistics of the Adhesives Industry 1935 - 1945

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
1935	17	389	423,513	114,604	550,700	1,436,259
1936	19	420	457,170	123,865	813,291	1,799,200
1937	18	416	483,819	116,842	901,194	1,904,137
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
Per cent change - 1945 from 1944	..	-8.7	-5.0	-28.5	-15.2	-3.6

For footnote, see page 2.

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Footnote to Table 1 -

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, 1944 and 1945

Province	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
<u>1944</u>						
Quebec	7	176	278,633	53,927	637,171	1,377,366
Ontario	15)	455	844,496	178,508	2,502,493	4,249,526
British Columbia	2)					
CANADA	24	631	1,123,129	232,435	3,139,664	5,626,892
<u>1945</u>						
Quebec	5	134	195,586	10,483	703,127	1,166,202
Ontario	13)	442	871,751	155,727	1,959,109	4,256,286
British Columbia	2)					
CANADA	20	576	1,067,337	166,210	2,662,236	5,422,488

Table 3 - EMPLOYEES, SALARIES AND WAGES, 1944 and 1945

	Average Number of Employees				TOTAL	Salaries	Wages	TOTAL SALARIES and WAGES
	On Salaries		On Wages					
	Male	Female	Male	Female				
<u>1944</u>								
Quebec	26	16	108	26	176	105,137	173,496	278,633
Ontario and British Columbia	89	41	293	32	455	304,003	540,493	844,496
CANADA	115	57	401	58	631	409,140	713,989	1,123,129
<u>1945</u>								
Quebec	21	23	59	31	134	93,201	102,385	195,586
Ontario and British Columbia	87	39	286	30	442	351,767	519,984	871,751
CANADA	108	62	345	61	576	444,968	622,369	1,067,337

Table 4 - WAGE-EARNERS, BY MONTHS, 1944 and 1945 (On the last work-day of each month)

Month	1944			1945		
	Male	Female	Total	Male	Female	Total
January	417	57	474	347	56	403
February	397	60	457	349	58	407
March	397	61	458	354	62	416
April	414	58	472	342	60	402
May	398	59	457	330	60	390
June	415	55	470	333	63	396
July	412	65	477	330	61	391
August	404	62	466	321	60	381
September	390	55	445	331	59	390
October	386	58	444	355	65	420
November	405	51	456	371	71	442
December	393	46	439	389	62	451
AVERAGE	401	58	459	345	61	406

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Table 5 - HOURS WORKED PER WEEK BY WAGE-EARNERS, 1944 and 1945 (In one week of highest employment; overtime included)

Hours worked per week	Number of Wage-Earners			
	1 9 4 4		1 9 4 5	
	Male	Female	Male	Female
30 hours or less	38	12	18	7
31-43 hours	34	1	55	47
44 hours	72	22	50	15
45-47 hours	56	39	111	6
48 hours	114	...	66	...
49-50 hours	19	1	18	...
51-54 hours	51	...	40	...
55 hours	16	...	6	...
56-64 hours	32	...	26	...
65 hours and over	21	...	6	...
TOTAL	453	75	396	75
Total wages paid in selected week	13,911	1,046	12,510	1,138

Table 6 - FUEL AND ELECTRICITY USED, 1944 and 1945

Kind	Unit of measure	1 9 4 4		1 9 4 5	
		Quantity	Cost at works	Quantity	Cost at works
Anthracite coal	ton	15	186	17	212
Bituminous coal -					
Canadian	ton	2,454	22,063	184	1,649
Foreign	ton	19,894	159,604	16,309	125,155
Coke	ton	49	635	102	1,189
Gasoline	Imp.gal.	39,685	12,092	26,304	9,147
Kerosene	Imp.gal.	140	25	40	7
Fuel oil	Imp.gal.	151,883	9,854	89,617	10,492
Wood	cord	45	600	24	158
Gas - Manufactured ..	M.cu.ft.	3,482	2,072	1,490	1,527
Electricity purchased	K.W.H.	1,865,957	25,304	609,812	16,674
TOTAL.....	...	....	232,435	...	166,210
Electricity generated for own use	K.W.H.	446,400	...	432,000	...

Table 7 - POWER EQUIPMENT, 1944 and 1945

	Ordinarily in Use		In Reserve or Idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
<u>1 9 4 4</u>				
Steam engines and steam turbines	6	610	2	90
Electric motors run by purchased power	312	1,528	21	127
TOTAL	318	2,138	23	217
Electric motors run by power generated in establishment ...	19	258	5	61
Stationary power boilers	14	1,531	1	60
<u>1 9 4 5</u>				
Steam engines and steam turbines	4	466	1	15
Electric motors run by purchased power	252	1,174	25	188
TOTAL	256	1,640	26	203
Electric motors run by power generated in establishment ...	20	393	5	61
Stationary power boilers	6	1,005

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Table 8 - MATERIALS USED IN MANUFACTURING, 1944 and 1945

	Unit of measure	1944		1945	
		Quantity	Cost at works	Quantity	Cost at works
Bones	ton	5,738	83,639	8,657	166,235
Hides and hide trimmings	ton	17,007	320,324	14,621	318,456
Casein	lb.	727,016	160,831	518,025	120,988
Dextrine	lb.	6,411,415	384,594	6,144,580	415,009
Flour, tapioca	lb.	1,238,198	103,732	652,499	64,009
Flour, soya bean	lb.	1,095,307	51,333	1,509,682	68,683
Flour, other	lb.	10,152,559	280,061	7,546,547	182,476
Glycerine	lb.	150,411	23,490	210,138	29,600
Gums	lb.	79,058	13,686	176,089	25,856
Lime	ton	814	8,475	268	3,327
Resin	lb.	497,704	87,828	410,560	82,990
Rubber	lb.	119,853	33,547	83,062	21,834
Solvents (benzol, naphtha, etc.)	gal.	248,995	61,580	...	57,659
Starch	lb.	1,235,266	64,235	1,915,340	78,029
Sulphur	lb.	139,600	2,058	113,600	1,464
Sulphuric acid 66° Be	lb.	1,608,771	13,981	730,496	6,801
Tallow and fat	lb.	4,564,538	229,733	41,025	4,418
Containers and packing materials	...	...	201,603	...	155,870
All other materials .....	...	...	1,014,934	...	858,532
TOTAL .....	...	...	3,139,664	...	2,662,236

Table 9 - PRODUCTS MADE IN THE ADHESIVES INDUSTRY 1944 and 1945

Product	1944		1945	
	Quantity	Selling value at works	Quantity	Selling value at works
	lb.	\$	lb.	\$
Cements - Linoleum	1,064,360	54,473	1,043,205	51,965
Other	1,079,500	287,222	881,778	181,787
Glue - Bone and hide	4,693,408	927,820	4,178,085	843,957
Casein	551,176	121,701	460,588	104,738
Fish	12,700	8,486	single firm	
Flexible	764,864	116,998	944,664	144,188
Soya bean	1,222,900	76,454	1,704,833	110,051
Synthetic resin	9,783,555	1,005,493	7,373,607	738,867
Vegetable - dry	3,340,816	259,447	2,287,089	170,191
liquid ..	15,784,506	1,000,441	15,699,975	978,807
Other	216,000	15,600	231,750	26,157
Mucilage	117,350	59,580	131,141	49,814
Paste - Dry	4,584,165	299,918	4,159,875	272,191
Liquid	757,720	16,663	856,022	21,396
All other products (x) .....	...	1,376,596	...	1,723,379
TOTAL .....	...	5,626,892	...	5,422,488

(x) 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.

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Table 10 - TOTAL PRODUCTION OF ADHESIVES IN CANADA - 1944 and 1945
(From all industries)

	1944		1945	
	Quantity	Selling Value at works \$	Quantity	Selling value at works \$
Cements - Linoleum	lb. ...	64,473	1,523,205	66,165
Rubber .....	...	485,684	...	353,500
Other .....	...	288,387	...	454,398
Glue - Bone and hide	lb. 4,693,408	927,820	4,178,085	843,957
Casein	lb. 551,176	121,701	460,588	104,738
Fish	gal. 84,500	167,264	(x)	(x)
Flexible	lb. 764,864	116,998	944,664	144,188
Soya bean	lb. 1,222,900	76,454	1,704,838	110,051
Synthetic resin ..	lb. 9,783,555	1,005,493	7,373,607	736,867
Vegetable - dry ..	lb. 3,340,816	259,447	2,287,089	170,191
liquid lb.	15,784,506	1,000,441	15,699,975	978,807
Other	lb. ...	34,951	305,768	43,112
Mucilage	lb. 221,210	99,611	...	83,091
Paste - Dry	lb. 4,659,870	309,003	4,268,786	285,260
Liquid	lb. 896,396	65,611	...	80,509
Adhesives, other (kind not stated)	...	189,836	...	224,603
TOTAL .....	...	5,213,174	...	4,681,437

(x) Single Firm

Table 11 - IMPORTS OF ADHESIVES INTO CANADA, 1944 and 1945

	1944		1945	
	Pounds	\$	Pounds	\$
Glue - Animal	2,601,445	435,957	3,929,178	652,848
Synthetic resin ..	1,029,297	290,348	516,306	135,202
Vegetable	19,206	1,668	27,840	2,754
Other	138,717	46,083	264,344	58,437
Mucilage and adhesive paste.	388,078	47,060	240,058	34,032
Rubber cement .....	...	194,450	...	207,991



LIST OF FIRMS IN THE ADHESIVES INDUSTRY, 1945

<u>Name</u>	<u>Location of Plant</u>
<u>QUEBEC -</u>	
B. B. Chemical Co. of Canada Limited	2610 Bennett Ave., Montreal
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. Limited	5565 Cote St. Paul Road, Montreal
<u>ONTARIO -</u>	
Butterworth, A. C.	103 Oak Crest Ave., Toronto
Canada Glue Co. Limited	Mohawk Road, Brantford
Delany & Pettit Limited	133 Jefferson Ave., Toronto
Harris, W., & Co. Limited	200 Keating St., Toronto
McCormick & Co. (Canada) Limited	218 Front St. W., Toronto
Machon Sealing Wax Company, The	678 Parliament St., Toronto
Meredith Simmons & Co. Limited	363-379 Wallace Ave., Toronto
Perkins Glue Company of Canada, Limited	629 Queen St., S., Kitchener
Poole Adhesives Limited	741 Talbot Street, London
Toronto Adhesive Company	27 Jarvis Street, Toronto
Stuart & Foster Limited	361 King St. E., Toronto
Stein-Hall Limited	250 Van Horne Street, 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

NOTE: This report was prepared by J. J. Parchelo, Statist
Products.