Published by Authority of Honk Jais. Malcolm, M.P., Minister, Department of Trade and Commerce.

DOMINION BUREAU OF STAMISTICS - CANADA
Damimion Statistician: R. H. Coats, B.A., F.S.S.(Hon.), F.R.S.C.
Mining, Metallurgical and Chemical Branch
Chief - S. J. Cook, B.A., A.I.C., F.C.I.C.


## PRELIMINARY SUUNARY REPORT ON CHEMICALS AND ALLIED PRODUCTS IN CANADA - 1926.

Canada's chemical industry again showed substantial progress in
1226. Froduction by the 533 plants reporting in 1926 was valued at $\$ 120,369,518$, an incrace of 7.5 million dollars over the reported value of sales in the preceding year and tho hishest on record since 1920 when enhanced prices partially accounted for the righ value of production at $\$ 224,545,772$; volume production in 1926 was the greatest since the war period. Capital employed at $\$ 132,279,179$ was also the highest since 1918 and was nearly 6 million dollars above the figure for 1925. Bmployment showed an increase to 14,313 from 13,951 in 1925 , and the yearly salary and wage earnings stood at $\$ 18,158,614$ as against $\$ 17,469,157$ in the previous year. Materials used cost $559,756,675$, ar. increase of 3.5 millions over 1926 .

Coal Tar and Its Products.- The 8 tar-distilling units and 7 plants manufacturins aisinfectants in 1926 gave employment to 190 peoplo and produced commodities valued at $\$ 2,942,443$, an increase of $\$ 319,622$ over the sales value of the 1925 output. Capital omployed at $\$ 4,208,697$ represented an increase of a million dollars. The principal products were creosote oil and other special oils, pitch, refincd tar, cresylic acid, tarred folts and shoathings, roofing coment and disinfectants.

Acids, Alkalios and Salts and Compressed Gases.- Froduction of industrial chomicals and gases tas groater in 1926. The 43 plants in this industrial group enploying a cavital of $\$ 38,186,983$ furnished employment to 2,406 norkers tho year round and converted $\$ 13,210,804$ worth of raw materials into finished uroducts valued at $\$ 28.717,401$, an advance of 1.2 million dollars over the total output value for 1925. Sulphuric, hydrochloric, nitric and acetic acids, caustic soda, salt cake, calcium carbide, cyanamide, liquid chlorine, phosphorus, oxygen, carbon dioxide and acetylene verc among the leading roducts. Industrial chemicals verc made in 20 different plants and ompressed gasos in 23 establishments.

Explosives, Ammunition. Firemorks and Matches.- Production value of explosives, ammuition, fireworks and matches mas maintained at about the lovel of the proceding year. Explosives mere made in 5 plants, amnunition in 3 , fireworks in 3 and
to whom $\$ 2,280,012$ was paid in salaries and mages and manufactured products worth $\$ 12,307,752$. Materials used cost $\$ 6,902,909$ giving thus $\$ 5,404,843$ as the value added by manifacture. Capital cmployed stood at $\$ 17,239,592$. The main products for salo Fero dynamites, monobels, gun porder, nitrate mixtures, safety cartridges, safety fuses, prcussion caps, detonators, railmay signals, manufactured firemorks and matches.

Fertilizers.- Production of manufactured fertilizors in 1926 amountod in value to $\$ 1,516,685$, a gain of $\$ 100,000$ over the output valuo reported in 1925 . Thelve plants were in operation, capital employcd stood at $\$ 1,818,743$, employecs numbered 214 and payments in salaries and wages totalled $\$ 204,246$. Materials used cost $\$ 1,033,680$ and the value added by manufacture was only $\$ 483,005$. This industry covers only those firms making complete fertilizors. Commoditios such as cyanamide, ammonium sulohate, tankage, dried blood, etc. are classified in othor industries. Imports of fertilizur material mere valued at $\$ 3,692,680$ and exports at $\$ 4,664,316$.

Medicinal and Pharmaceutical Preparations.- Thero Mere 126 plants in operation In this industry in 1926 as compared with a total of 120 in the preceding year. Prom duction for the year was valued at $\$ 15,145,641$ as against $\$ 13,987,849$ in 1925 . Employees numbered 2,358 and their yearly carnings totalled $\$ 2,842,662$. Imports of medicinal and pharmaceutical preparations and other drugs totalled \$3,100,911 as against $\$ 2,968,089$ in 1925.

Paints, Pigments and Varnishes.- Production in the paints, pigments and varnishes industry advanced 2.5 milion dollars above tho figuro for last year and amounted in value to $\$ 24,702,385$. Sixty-three plants wor in operation during the year employing a capital of about 23 million dollars and used raw matorials worth $\$ 12,947,639$ in the manufacture of commoditios for sale. Invloyees averaged 2,471 in number as against 2,355 in 1925. Imports totalled $\$ 4,377,998$ in 1926 and exports rere morth $\$ 502,183$.

Soans, Washing Comoounds and Toilet Preparations. - Whis industry also shomed a substantial increase in production value during 1926. The sales value of output in that year totalled $\$ 18,908,991$ as asainst $\$ 17,388,506$ in tho proceding year. More than 2.5 million dollars mas paid to the 1,997 cmoloyees. Rav materials cost $\$ 10,910,278$. Canital omployed stood at $\$ 17,021,005$ as against $\$ 16,731,558$ in 1925. Thirty-eight concerns vroduced soavs chiefly, 22 were classed as manufacturers of washing compounds, and 40 as makers of toilet proparations as their principal product. Imports of soap reached a valuo of $\$ 1,199,893$ and cxoorts, to $\$ 783,261$.

Inks, Dyes and Colours. - Printing inks, writing inks, dyes and dye soaps, printers' rollers, caramel, mortar colours, stains, mucilage and paste mere the main
products of this inaustry. In 1926, there were 26 plants in operation and production Wes well maintained at $\$ 2,800,871$. Capital employed amounteu to $\$ 2,705,266$ and the number of morkers stood at 438 . Seven plants made writing inks as the main product, 13 made printing and ithographic inirs and printurs' rollers, and 6 made dyes and colctirs.

Wood Distillates and Extracts.- Production showed a slight decline in value to $81,774,993$ as compared with $\$ 2,989,996$ in 1925. Only 9 plants verc in operation, canital omployed stood at $\$ 2,217,049$ and the 255 morkers were paid $\$ 214,694$ in Salaries and wages during the year.

Miscollaneous Chemical Industries.- In addition to the industries reviowed in the precedi ng paragraphs there were 124 plants producing other chomical products of various kinds in Canada during 2926. The output of those factories reached a value of $\$ 21,592,356$ from materials which cost $\$ 5,461,224$. More than 1,800 persons mere employed. Adhesivos, baking powd r, boiler compounds, celluloid products, flavouring estracts, insecticidos, polishes and cressings, sweeping compounds and other chemical product: are Included in thin srewe.

Taports of chemicals into Canada shoved a substantial increase over 1925 while exponts pere considerably lowor. Total imports for the year, of chemicals and allied products, had a value of $\$ 31,358,384$ as compared with $\$ 27,653,819$ in 1925. Important gains were recorded in the fertilizers, paints and inorganic chemicals groups while nearly all other classes showed small gains. Sixty-four por cent of all imports come from the United States, 16 por cont from United Kingdom and 20 per cent from other countries,chicf among which wore Germany, France, Notherlands, Chile, Argentina, Belgiun, and Switzerland.

Expurts waro velued at $\$ 16,308,773$ as against $\$ 17,490,254$ in 1925 . Cyanamide, calcium carbide, sodium cyanide, acetic acia, soaps, cobalt oxide, Hero among the most important items on the list. Of the total, 50 per cent of Canada's exports of chemical products went to the United States, 20 per cent to the Onited Kingdom and 30 por cent to other countries, chief among winich were Mexico, Japan, Nevfoundland, Portugrese Africa, Cuba, New Zealand, Barbados, Australia, China, and Chile in the order named.

Prices of chemical products remained at about the same level during 1926.
Based on 1913 prices as 100 the Bureau's index number for chemicals and allied products which showed an average of 157.1 in 1925 was calculated at 157.8 for 1926 "ith only slight variations from month to month.

| Yuar | No. of Plants | Canital Bmployed | No. of Employces | Galaries and Tases | cost of Materials | Selling Value of Products | Value added by Manufacturing $\$$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CCAD TAR AND ITS PRODUCTS |  |  |  |  |  |  |  |
|  | 8 | 1,237,077 | 90 | 110,026 | 313,341 | 886, | 3.017 |
| 10 | 14 | 3,205,780 | 239 | 334,965 | 1,381,724 | 3,166,1 | 1,784,376 |
|  | 14 | 3,099,995 | 208 | 280,728 | 1,137,497 | 2,637. | 1,500,076 |
|  | 15 | 3,281,332 | 190 | 275,416 | 1,418,892 | 2,622,8 | 1,203,929 |
|  | 15 | 4,208,697 | 190 | 263,414 | $1.808,481$ | 2,942,4 | 1,133,962 |
| ACIDS, AIKAIIES, SAITS AND COIPEESSED GASES |  |  |  |  |  |  |  |
| 192 | 46 | 35,163,154 | 2,189 | 2,917,361 | 6,166,469 | 16,879, | 10,712,798 |
| 19 | 47 | 36,436,315 | 2,788 | 3,780,443 | 11,636,321 | 23,912, | 12,276,671 |
|  | 41 | 34,298,071 | 2,413 | 3,469,320 | 11,616,643 | 26,241, | 14,625,079 |
|  | 40 | 35,655,528 | 2,409 | 3,474,290 | $12,843,256$ | 27,483, | 14,640,139 |
|  | 43 | 38,186,283. | 2,406 | $3,529,816$ | $13,210,804$ | 28, 717, | $15,506,597$ |
| EXPLOSIVES, AILIUNITION, FIREWORKS AND KATCFES |  |  |  |  |  |  |  |
| $\times 1922$ | 20 | 13,328,938 | 2,326 | 2,554,539 | $8,893,740$ | 13,788, | 4,894,918 |
| $\times 1923$ | 18 | 15,131,953 | 2,463 | 2,588,874 | 9,270,641 | 14,428, | 5,157.749 |
| x194 | 18 | 17,184,725 | 2,350 | 2,489,248 | 8,787,392 | 13,310,3 | 4,522,923 |
| 192 | 15 | 16,827,321 | 2,072 | $1,903,769$ | 6,848,921 | 12,313,1 | 5,464,234 |
| 1926 | 15 | 17,239,592 | 2,173. | 2,280,012 | 6,902,909 | 12,307,7 | . 404,843 |

FERTILIZENS

| $1922 \ldots$ | 17 | $3,935,467$ | 344 | 348,879 | $1,098,230$ | $1,981,418$ | 883,188 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1923 \ldots$ | 18 | $3,616,001$ | 329 | 310,441 | 831,470 | $1,487,244$ | 655,774 |
| $1924 \ldots$ | 14 | $2,072,488$ | 166 | 159,310 | 730,158 | $1,277,145$ | 546,987 |
| $1925 \cdots$ | 13 | $2,095,608$ | 101 | 205,117 | $1,045,294$ | $1,437,787$ | 392,493 |
| $1926 \ldots$ | 12 | $1,818,743$ | 214 | 204,246 | $1,033,680$ | $1,516,685$ | 483,005 |


| $1922 \ldots$ | 109 | $13,995,461$ | 2,302 | $2,752,680$ | $4,145,298$ | $11,532,536$ | $7,387,238$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1923 \ldots$ | 104 | $14,655,699$ | 2,271 | $2,667,741$ | $4,474,487$ | $12,256,608$ | $7,782,121$ |
| $1924 \ldots$ | 104 | $15,156,479$ | 2,193 | $2,666,997$ | $4,895,352$ | $13,350,347$ | $8,454,995$ |
| $1925 \ldots$ | 120 | $16,037,286$ | 2,273 | $2,892,975$ | $4,798,120$ | $13,987,849$ | $9,189,729$ |
| $1920 \ldots$ | 126 | $16,500,310$ | 2,358 | $2,842,662$ | $5,552,745$ | $15,145,641$ | $9,592,896$ |


| FAINIS, PIGWENIS AND NARUISFHS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1923. | 57 | 20,806,909 | 2,591 | 3,565,823 | 10,754, 273 | 21,553,158 | 10,798,885 |
| 1924 | 55 | 20,587,856 | 2,287 | 3,044,228 | 11,674,837 | 20,200,824 | 8,525,987 |
| 1925 | 62 | 21,460, +31 | 2,355 | 3,093.191 | 12,613,995 | 22,234,268 | 9,620,273 |
| 1926. | 63 | 22,947,040 | 2,471 | 3,353, 551 | $12,047,639$ | 24,702,385 | $11,754,746$ |

SOAFS, TASHING CCNPOUNDS AND TOIIET PNEPARATIONS

| $1922 \ldots$ | 68 | $15,781,244$ | 1,873 | $2,215,316$ | $8,484,676$ | $15,841,905$ | $7,357,629$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1923 \ldots$ | 70 | $15,668,592$ | 2,082 | $2,459,655$ | $9,400,752$ | $17,909,011$ | $8,508,259$ |
| $1924 \ldots$ | 66 | $16,367,069$ | 1,94 | $2,359,060$ | $8,782,085$ | $15,965,318$ | $7,183,233$ |
| $1925 \ldots$ | 85 | $16,731,558$ | 2,050 | $2,618,507$ | $10,093,741$ | $17,388,506$ | $7,294,705$ |
| $1926 \ldots$ | 100 | $17,021,005$ | 1,997 | $2,537,843$ | $10,910,278$ | $18,908,991$ | $7,998,713$ |
| $1922 \ldots$ | 26 | $2,146,953$ | 416 | 668,719 | $1,070,287$ | $2,756,006$ | $1,685,719$ |
| $1923 \ldots$ | 26 | $2,252,370$ | 415 | 659,336 | $1,141,102$ | $2,876,347$ | $1,735,245$ |
| $1924 \ldots$ | 24 | $2,391,859$ | 377 | 632,607 | 942,325 | $2,656,400$ | $1,714,075$ |
| $1925 \ldots$ | 27 | $2,669,720$ | 403 | 677,077 | 968,830 | $2,749,807$ | $1,780,977$ |
| $1926 \ldots$ | 26 | $2,705,266$ | 438 | 722,431 | $1,060,438$ | $2,800,871$ | $1,740,433 \ldots$ |



