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DEPARTMENT OF TRADE AND COMMERCE
    DOMINION BUREAU OF STATISTICS
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    ++ Census of Industry ++ +
    GENERAL MANUFACTURING STATISTICS

## MONTHLY REPORT

## ON

CONSUMPTION,

## PRODUCTION AND INVENTORIES

OF RUBBER,
JULY, 1947.


## GSNERAL MANUFACTUR DNO STATISTICS

## OTTAWA - CANADA

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## CONSUMPTION, PRODUCTION AND INVENTORIES OF RUBBER

$$
\text { JULY, } 1947
$$

During the years of Control, monthly Rubter Statistics were developed, showing consumption by types of rutter, and by end product classifications, together with stocks, new production of synthetics, etc. These statistics show clearly the impact on rubber consumers of the loss of natural rubber supplies, and the consequent growth of the synthetic rubber industry. Since they show consumption ty end product classification, they are a useful record of the extent to which synthetics,were consumed in each of the broad product fields.

Commencing with March, 1947, the Dominion Bureau of Statistics undertook the continuance and puklication of a similar, though modified, series, and all available material to date is included in this report. Historical tables, prepared largely from the Rubter Control records, have also been included, in order that valuatle material might thus be presented in a condensed form, and also that relationships might be established for the evaluation of current data.

However, assumptions which were valid during the period of control due to the fact that the movements of the commodity were under direction, are no longer sufficiently reliakle to permit the publication of import - export data based on receipts and sales of manufacturers, or to assume that the imports of some specific synthetic by a particular manufacturer represent the total new supply of this synthetic. Nor can the inventories of manufacturers, whether producing or consuming, be considered as total since the re-establishment of normal trade channels indicates dealer inventories outside the scope of an industry survey. Also the quantity of foreign or domestic rubler in transit at the close of any period is not known.

Therefore, the statistics now available monthly, are considered only to represent elearly and accurately (a) the new damestic production of synthetic and reciaim, and the inventories of firms reporting this production, and (b) the total consumption of rubber, whether foreign or domestic, together with inventories, receipts and sales of rubber by consuming manufacturers in all industries. The addition of the two inventories give the total stocks held by industry.

The historical tables have now been revised to omit import - export columns, and the current rubber balance statement has been broken down into (a) and (b) as outlined in the preceding paragraphs.

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However, despite the fact that the total available supply is not known and that it is impossible to relate shipments and receipts the data given in ( $k$ ) do ultimately account for the total consumption of rubber in canada, and should be capatle of being co-related with new production and export - import data (as compiled by External Trade Branch, D. B. So) over a period of months.

The sections showing cansumption of rubber, by types, and by ond products have not been changed, since they do correctly represent total consumption in each case.

## Section A. Canadian Rubler Ealance Statement

This section includes sumary date on natural, synthetic and reclaim rubber, showing stocks, domestic production, and domestic consumption. Table 1 gives yearly averages, 1939 - 1945, and actual months, July, 1945 to July, 1947. Table 2 gives details for June and July, 1947.

For detailed data for consumptior, by specific types, and ty end products classifications, wherever pussitle, see Section $B$, Natural Rubver; Section C, Synthotic Rubber; and "Section $D$, Reclaim Rubber.

Table 1. - Summary Statement of all Rubber Stocks, Domestic Pruduction, Domestic Consumption showing Monthly Averages, 1939 - 1945, and Actual Monthly Totals, July, 1945 to July, 1947.

Neights are Eiven in Long Tons (2,240 pounds)

| Period | Stocks, 5 and of Period |  |  | Domestic Production |  | Domestic Consumption |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natural | Synthetic | Roclaim | Synthetic | Reclaim | Natural | Synthetic | Reclaim |
| Monthly Averages |  |  |  |  |  |  |  |  |
| 1939 ... | n.a. | n. ${ }^{\text {. }}$ | n.a. | - | - | 2,635 | - | 626 |
| 1940 ... | n. 2. | n.2. | n.a. | - | - | 3,083 | - | 703 |
| 1941 ... | n.a. | n.a. | n. 2. | - | - | 4,436 | - | 789 |
| $1942 \ldots$ | no. | n.a. | 4,560 | - | - | 3,512 | - | 1,042 |
| 1943 ... | 8,165 | 2,292 | 4,822 | 210 | 392 | 2,434 | 307 | 1,166 |
| $1944 \ldots$ | 5.399 | 3,641 | 3,516 | 2,902 | 263 | 799 | 2,061 | 1,052 |
| $1945 \ldots$ | 3,703 | 4,107 | 2,219 | 3,810 | 276 | 491 | 2,995 | 1,276 |

## CONSUMPTION, PRODUCTION AND INVENTORIES OF RUEBER

Section A. Canadian Rubter Balance Statement

Tatle 1. - Summary Statement of all Rubrer Stocks, Domestic Production, Dumestic Consumption showing Monthly Averages, 1939 - 1945, and Actual Monthly Totals, July, 1945 to July, 1947. - Concl.

Feights are given in Long Tons (2,240 pounds)

| Period | Stocks, find of Period |  |  | Domestic Production |  | Domestic Consumption |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natural | Syn- <br> thetic | Reclaim | Synthetic | Reclaim | Natural | Syn- <br> thetic | Reclaim |
| $\begin{aligned} & \text { Monthly } \\ & \text { Totals } \end{aligned}$ |  |  |  |  |  |  |  |  |
| 1945 - July | 4,007 | 5,284 | 2,700 | 4,007 | 201 | 415 | 2,728 | 1,003 |
| Aug. | 4,798 | 4,989 | 2,809 | 3,399 | 309 | 349 | 2,319 | 1,117 |
| sept. | 4,517 | 3,938 | 2,617 | 2,783 | 265 | 383 | 2,948 | 1,357 |
| Oct. | 4,637 | 4,146 | 2,456 | 3,541 | 327 | 395 | 3,206 | 1,483 |
| Nov. | 4,165 | 4,106 | 2,102 | 3,984 | 353 | 473 | 3,613 | 1.559 |
| Dec. | 3,703 | 4,124 | 2,219 | 3,575 | 249 | 461 | 3,082 | 1,373 |
| 1946 - | 3,025 | 4,995 | 2,150 | 4,255 | 290 | 674 | 3,446 | 1,525 |
|  | 2,466 | 4,183 | 2,228 | 3,818 | 326 | 707 | 3,356 | 1,400 |
|  | 3,000 | 3,871 | 2,358 | 3,816 | 343 | 835 | 3,741 | 1,537 |
|  | 2,845 | 3,773 | 2,575 | 4,317 | 288 | 817 | 3,808 | 1,505 |
|  | 2,278 | 3,332 | 2,572 | 3,707 | 341 | 938 | 3,699 | 1,418 |
|  | 1,775 | 3,978 | 2,409 | 4,542 | 300 | 702 | 2,946 | 1,363 |
|  | 2,021 | 7,058 | 2,672 | 4,282 | 264 | 172 | 588 | 519 |
|  | 2,929 | 9,045 | 3,054 | 4,570 | 35.2 | 229 | 530 | 594 |
|  | 4,307 | 8,742 | 3,235 | 3,728 | 349 | 294 | 635 | 656 |
|  | 5,752 | 7,734 | 3, 630 | 4,526 | 344 | 433 | 1,051 | 846 |
|  | 7,661 | 5,829 | 3,194 | 4,634 | 414 | 1,854 | 3,048 | 1,485 |
| Dec. | 5,885 | 4,565 | 3,455 | 4,786 | 356 | 1,850 | 2,768 | 1,292 |
| 1947 - | 3,729 | 4,316 | 3,195 | 4,408 | 329 | 2,153 | 3,195 | 1,533 |
|  | 2,876 | 4,551 | 3,114 | 4,024 | 330 | 2,224 | 2,823 | 1,463 |
|  | 4,473 | 5,344 | 2,872 | 4,466 | 360 | 2,440 | 2,876 | 1.570 |
|  | 7,187 | 5,473 | 2,931 | 4,628 | 360 | 2,476 | 2,942 | 1,395 |
|  | 9,992 | 4,953 | 2,772 | 3,467 | 359 | 2,643 | 2,889 | 1,438 |
|  | 10,108 | 4,488 | 2,599 | 3,392 | 334 | 2,627 | 2,540 | 1,299 |
|  | 10,045 | 3,733 | 2,629 | 3,480 | 225 | 2,433 | 2,059 | 1,120 |

Note: Poundage of Guavule Rubrer included in Natural Rubber totals is on a deresinated basis. All other wild rubker is calculated on a Washed and Dried basis. Also it should be particularly noted that all stocks are taken at the raw level, or the level on which rubber may be used as a material. They would include compound latex purchased for consumption by a manufacturer but would not include the semi-processed, or finished goods, held in inventory by the manufacturer.

## CONSUMPTION, PRCDUCTION ANL INVENTCRIES OF RUBBER

Table $2(a)$. - NEW SUPPLY. Statement of Manufacturer producing Synthetic and Reclaim Rubker.
(Weight in Long Tons)


## CONSUMPTION, PRODUCTION AND INVENTORIES OF RUBBER

## Soction B. Natural Rubber

The June and July, 1947, consumption of Natural Rubber showing crude rubber and natural latox separately, and arranged according to end products classifications, is shown in Table 5.

Summary data, by months, January, 1946 - July 1947, are shown in Table 4, and 1939 - 1946 yearly totals and monthly averages are given in Table 3 . Crude rubber and natural latex do not appear separately in summary tables, but are combined under the heading "Natural".

For summary data on Synthetics, Natural and other rubber stocks, domestic production, domestic consumption, expressed in long tons, see Table l. However, when comparing monthly consumption of natural rubber, as given in Table l, with consumption as shown in detailed tables by end product classification, it should be noted that in Table 1, Guayule Rubber is reduced to a deresinated besis, whereas in the dotailed tables it is included at the weight roported by the firms. Commen cine with March 1, 1947, poundage of Guayule included in all tables is on a deresinated basis, and totals should, therefore, agree.

Table 3. - Consumption of Natural Rubber in Total, and Showing Monthly Averages, 1939-1946.


Table 4. - Consumption of Natural Rubter in Total, by fand Products, and by Months, January, 1946-July, 1947, Showing also percentage of Natural to All Synthetic and Natural Consumed.

| Month | Natural Rubber |  | Used in the manufacture of - |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Percentage of all rubber | Tires and tubes | Repair Materials | $\begin{aligned} & \text { Mechanical } \\ & \text { Goods } \end{aligned}$ | $\begin{aligned} & \text { Wire and } \\ & \text { Caule } \end{aligned}$ | Footwear | Miscellaneous |
|  | 000 's pounds | Per cent | 000 's pounds | 000 's pounds | 000's pounds | 000's pounds | 000: 8 pounds | 000 's pounds |
| 1946 - January | 1,546 | 16.68 | 1,065 | 40 | 97 | 4 | 307 | 32 |
| February .... | 1,624 | 17.78 | 1,054 | 34 | 99 | 5 | 395 | 37 |
| Narch ....... | 1,905 | 18.60 | 1,232 | 25 | 122 | 11 | 469 | 46 |
| April ....... | 1,855 | 17.85 | 1,214 | 26 | 145 | 14 | 405 | 50 |
| May ........ | 2,116 | 20.34 | 1,404 | 33 | 139 | 18 | 448 | 74 |
| June ........ | 1,576 | 29.26 | 964 | 26 | 114 | 26 | 380 | 67 |
| July ......... | 388 | 22.72 | 98 | 4 | 38 | 9 | 193 | 45 |
| August ...... | 513 | 30.21 | 154 | 3 | 50 | 11 | 225 | 71 |
| September ... | 658 | 31.64 | 252 | 13 | 70 | 13 | 248 | 62 |
| Dctober ..... | 970 | 2\%.18 | 488 | 15 | 95 | 13 | 283 | 76 |
| November . . . | 4,163 | 37.89 | 3,373 | 37 | 230 | 25 | 411 | 88 |
| December .... | 4.145 | 40.06 | 3,311 | 65 | 225 | 25 | 413 | 106 |
| 1947 - January ..... | 4,824 | 40.26 | 3,925 | 56 | 256 | 20 | 436 | 130 |
| Fetruary .... | 4,982 | 44.06 | 3,990 | 50 | 290 | 24 | 507 | 119 |
| March ...... | 5,465 | 45.89 | 4,275 | 42 | 323 | 22 | 624 | 178 |
| spril ....... | 5,546 | 45.59 | 4,375 | 42 | 302 | 25 | 612 | 190 |
| May.......... | 5,921 | 47.78 | 4,473 | 30 | 354 | 35 | 792 | 237 |
| June ........ | 5,885 | 50.84 | 4,361 | 39 | 387 | 45 | 788 | 265 |
| July ........ | 5,448 | 54.16 | 4,133 | 36 | 410 | 14 | 641 | 214 |

## - 7 - <br> CONSUMPTION, PRODUCTION AND INVENTORIES OF RUBEER

Table 5 (a). - Consumption of Natural Rubter, by Types and by End Product Classification, June, 1947.


Tatle 5 (b). - Consumption of Natural Rubber, by Types and by End Product Classification, July, 1947.

| Fnd Products | Crude Rubber (excluding latex) | Latex | Total Crude and Latex |
| :---: | :---: | :---: | :---: |
|  | pounds | pounds | pounds |
| 1. Tires and tubes | 4,127,543 | 5,569 | 4,133,112 |
| 2. Tire repair materials (including cements and camelback) ................. | 35,086 | 750 | 35,836 |
| 3. Mechanical koods ...... | 409,988 |  | 409,988 |
| 4. Wire and cable ............ | 14,169 | - | 14,169 |
| 5. Footwear (including heels, soles, etc.) ............ | 639,517 | 1,694 | 641,211 |
| 6. Miscellaneous ........... | 126,197 | 87,530 | 213,727 |
| TOTAL ................. | 5,352,500 | 95,543 | 5,448,043 |

## CONSUMPTION, PRODUCTION AND INVENTORIES OF RUBBER

## Section C. Synthetic Rubber

The June and July, 1947, consumption of Synthetic Rubber is shown, by type, and by end product classification, in Tatle 9.

Sumary data, by months, July, 1945 to July, 1947, are shown in Tables 7 and 8, while 1943 - 1946 yearly totals and monthly averages are given in table 6.

For summary data on Synthetic and other rubler stocks, domestic production, domestic consumption, expressed in long tons, see Table 1.

> Table 6. - Consumption of Synthetic Rubber in Total, and showing Monthly Averages, $1943-1946$.

| Year | $\frac{\text { Total }}{\text { Found }}$ | $\begin{aligned} & \text { Monthly } \\ & \text { Averages } \\ & \text { Pounds } \end{aligned}$ |
| :---: | :---: | :---: |
| 1943 | 8,252,160 | 687,680 |
| 1944 | 55,399,680 | 4,616,640 |
| 1945 | 80,505,600 | 6,708,800 |
| 1946 | 66,357,973 | 5,529,831 |

Table 7. - Consumption of Synthetic Rubber, by Types and by Konths, July, 1945 to July, 1947

| Month | Buna 5 | Butyl | Neoprene | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | pounds | pounds | pounds | pound's | pounds |
| 1945 - July ........ | 5,283,550 | 649,716 | 148,262 | 28,326 | 6,109,854 |
| August ...... | 4,468,104 | 566,889 | 150,926 | 11,191 | 5,197,110 |
| Soptember | 5,647,551 | 754,749 | 183,441 | 16,571 | 6,602,312 |
| October ..... | 6,126,762 | 838,316 | 201,847 | 13,710 | 7,180,635 |
| November | 6,920,455 | 929,364 | 225,173 | 12,860 | 8,087,852 |
| December | 5,884,613 | 799,161 | 197,200 | 18,765 | 6,899,739 |
| 1946 - January ..... | 6,525,620 | 966,922 | 210,560 | 18,912 | 7,722,014 |
| February | 6,324,833 | 934,575 | 228,480 | 22,881 | 7,510,769 |
| March .. | 7,146,789 | 923,442 | 286,720 | 27,825 | 8,384,776 |
| April | 7,273,779 | 991,946 | 248,640 | 21,544 | 3,535,909 |
| May | 6,945,265 | 1,030,234 | 277,760 | 35,315 | 8,288,574 |
| June | 5,515,190 | 819,974 | 253,120 | 19,177 | 6,607,461 |
| July | 1,064,494 | 79,115 | 165,760 | 8,567 | 1,317,936 |
| August ...... | 973,714 | 62,611 | 143,360 | 6,022 | 1,185,707 |
| September ... | 1,138,981 | 108,720 | 170,240 | 4,355 | 1,422,296 |
| october | 1,921,885 | 246,885 | 176,960 | 9,066 | 2,354,796 |
| November | 5,548,222 | 1,029,746 | 237,440 | 10,268 | 6,825,676 |
| December | 5,000,720 | 953,020 | 237,680 | 10,639 | 6,202,059 |
| 1947 - January ..... | 5,710,124 | 1,199,032 | 230,720 | 18,173 | 7,158,049 |
| Fobruary .... | 5,034,216 | 1,095,348 | 176,960 | 18,814 | 6,325,338 |
| March .. | 5,122,804 | 1,001,714 | 241,890 | 76,249 | 6,442,657 |
| April ......... | 5,201,926 | 1,162,252 | 217,750 | 9,477 | 6,591,405 |
| May | 5,135,107 | 1,092,810 | 225,866 | 16,464 | 6,470,247 |
| June July ........... | $4,447,404$ $3,689,525$ | 960,038 759,452 | 219,914 146,944 | 63,014 15,129 | 5,690,370 <br> $4,611,050$ |

Tarle 8. - Consumption of Synthetic Rubber, in Total, by Find Products, and by Konthe, January, $1946-J u l y, 1947$, Showing also Percentage of Symthetic to all Natural and Synthotic Consumed.


## CONSLMPTION, PRODUCTION AND INVENTORIES OF RUEBER

Tatle $9(a)$. - Consumption of Synthetic Rubber, by Types and ty End Froduct Classification, June, 1947.

| End Products | Buna S | Butyl | Neoprene | Other | Total Synthetic |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | pounds | pounds | pounds | pounds | pounds |
| 1. Tires and tubes | 3,396,445 | 942,101 | 1,075 | - | 4,339,621 |
| camelback)......... | 37,218 | 30 | - | - | 37,248 |
| Mechanical goods ..... | 449,321 | 5,999 | 124,850 | 35,354 | 615,524 |
| Vire and cable. | 141,983 | 400 | 21,781 | - | 164,164 |
| soles, etc.) ........ | 207,728 | - | 1,498 | 695 | 209,921 |
| 6. Miscellaneous | 214,709 | 11,508 | 70,710 | 26,965 | 323,892 |
| TORAL | 4,447,404 | 960,038 | 219,914 | 63,014 | 5,690,370 |

Table $9(\mathrm{~b})$. - Consumption of Synthetic Rubber, by Types and by End Product Classification, July, 1947.


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## Saction D. Reclaim Rubber

No end product consumption data are availate ior Reclaim Rubber. IIow ever, Reclaim is usually classified as (a) Dispersions, and (b) Other than dispersions. This break-down Eives some broad indication of the end product use. "Other than Dispersions" would compare with crude rubter, while "Dispersions" would compare with natural latex.
(In general, dispersions are mechanical dispersions of rubier, resins or reclaim, the products beimg similar to compounced latex. easically, they are a suspension of rubler or resin in Yater. Natural rubler latex could bo considored as the "classic naterial", and the others as later" developments that come about through necessity of advancing technological knowledge. They are used where latex was, might be, or could be usud.)

Tatles 10 and 11 give the consumption of Reclaim, in total, for the years 1939 - 1946 , with monthly averaces for each year and broken down into Dispersions and other than Dispersions, by actual morths, July, 1945 to July, 1947.

For sumnary data on Reclaim, Synthetics, and other rubter stocks, dunestic production, domestic consumption, expressed in long tons, see Tablo 1.

Table 10. - Consumption of Reclaim Rubter, in Total, und ty Monthly Averages, 1939-1946.

| Year | $\frac{\text { Total }}{\text { Pound s }}$ | Monthly <br> Average |
| :---: | :---: | :---: |
| 1939 | 16,826,880 | 1,402,240 |
| 1940 | 18,890,640 | 1,574,720 |
| 1941 | 21,208,320 | 1,767,360 |
| 1942 | 28,008,960 | 2,334,080 |
| 1943 | 31,342,080 | 2,611,840 |
| 1944 | 28,277,760 | 2,356,480 |
| 1945 | 34,298,850 | 2,858,240 |
| 1946 | 31,673,600 | 2,639,467 |

Table 11. - Consumption of Reclaim Rubber, by Types, and by Months, July, 1945 to July, 1947.


