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MARKET INTELLIGENCE

SILICONE RESINS IN PRIMARY FORMS

OCTOBER, NOVEMBER AND DECEMBER 1988

Pub. No.: 89014-PM February 1990



Canada



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Industry, Science and Technology Canada
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Ottawa, Ontario
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REFERENCE SOURCES

Industry, Science and Technology Canada
Statistics Canada
Revenue Canada

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Revenue Canada
Customs and Excise
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K1A 0L5
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External Affairs
Ottawa, Ontario
K1A 0G2
Tel.: (613) 993-6435 OR
1-800-267-8376

EXPLANATORY NOTES

Commodity Classification

Canadian Trade statistics are classified and published according to the International Convention on the Harmonized Commodity and Description Coding System (H.S.), as defined by the Canadian Customs Tariff and Statistical Nomenclature.

Method

The data shown in this analysis are extracted from Revenue Canada Customs documents. These documents provide a description of the products, names of importers, foreign exporters, quantities, dollar values, unit prices, countries of origin, provinces of entry, tariff applications and rates of exchange.

The information presented in this report is more detailed than that generally available from Statistics Canada or other publications. Data which might reveal information about individual importers are aggregated.

Valuation

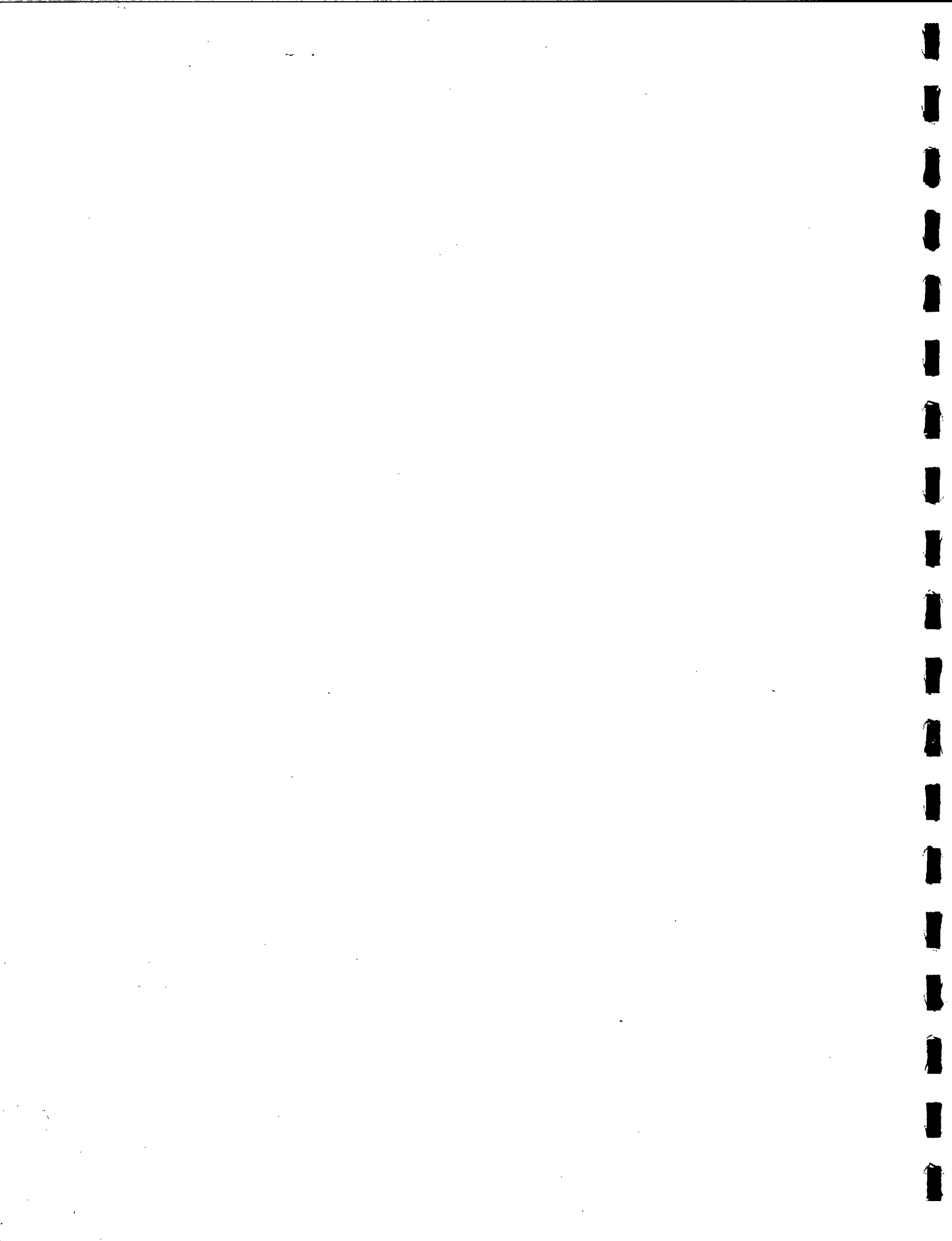
Dollar values shown in this report are based on selling price F.O.B. plant, in Canadian dollars. This selling price represents the value paid by the importer, excluding all freight, packing and insurance costs when specified. All trade discounts, when applicable, are also deducted from the selling price.

Rounding

Figures may not add due to rounding.

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SILICONE RESINS IN PRIMARY FORMS

I. INTRODUCTION AND SCOPE

This Import Analysis is one of a series prepared in order to assist businesses and other organizations in their market research of specific products. The detailed import information provided in these reports supports studies by organizations seeking to expand existing production lines, change individual product characteristics or engage in new manufacturing investment in Canada. The coverage of an import analysis is developed in close consultation with the client, and is tailored to meet those specific requirements. It is important to emphasize that this report does not attempt any assessment as to the feasibility of competing in a particular market.

This analysis of imports of Silicone Resins in Primary Forms is based on a detailed examination of Revenue Canada Customs import documents for the period of October, November and December 1988. Documents with the following code were analyzed:

| <u>Description</u> | <u>H.S. Commodity Code Analyzed</u> |
|----------------------------|---|
| Silicones in Primary Forms | 3910.00.00.00 |

A total quantity of 2.8 million kilograms for a value of \$11.7 million was classified to the aforementioned H.S. commodity code during October, November and December 1988. At the time of conducting this analysis, many National Revenue Customs documents were not available for processing. This analysis reports on those documents (shipments) which were available. These documents totalled 1.5 million kilograms valued at \$7.1 million.

Ninety percent of shipments of silicone resins in primary forms originated in the United States. As a result, the weights reported on Customs documents were mostly in pounds. In order to convert to the metric system a factor of 2.2046 lbs. per kilogram was used.

Further H.S. Customs Tariff Code information may be found in Appendix F.

SILICONE RESINS IN PRIMARY FORMS

I. INTRODUCTION AND SCOPE (Cont'd)

Imports of silicone resins in primary forms (H.S. Commodity Code 3910.00.00.00) during January to December 1988 amounted to 11 million kilograms valued at \$51 million.

Imports for 1989 increased over the 1988 total by 65 thousand kilograms for a value of \$3.9 million or 1 per cent in quantity and 8 per cent in value.

1988

| <u>Jan.-March</u> | | <u>April-June</u> | | <u>July-Sept.</u> | | <u>Oct.-Dec.</u> | | <u>Total</u> | |
|---------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|------------------|
| Quantity (000kg) | Value (\$000) | Quantity (000kg) | Value (\$000) | Quantity (000kg) | Value (\$000) | Quantity (000kg) | Value (\$000) | Quantity (000kg) | Value (\$000) |
| 3 200 | 13 798 | 2 545 | 13 586 | 2 416 | 11 663 | 2 819 | 11 652 | 10 980 | 50 699 |

1989

| <u>Jan.-March</u> | | <u>April-June</u> | | <u>July-Sept.</u> | | <u>Oct.-Dec.</u> | | <u>Total</u> | |
|---------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|------------------|
| Quantity (000kg) | Value (\$000) | Quantity (000kg) | Value (\$000) | Quantity (000kg) | Value (\$000) | Quantity (000kg) | Value (\$000) | Quantity (000kg) | Value (\$000) |
| 2 952 | 14 033 | 3 010 | 15 026 | 2 476 | 13 022 | 2 607 | 12 522 | 11 045 | 54 603 |

II. ANALYSIS OF IMPORTS SILICONE RESINS IN PRIMARY FORMS

OCTOBER, NOVEMBER AND DECEMBER 1988

Imports of silicone resins in primary forms totalled 3.4 million lbs. for a value of \$7.1 million for the period October, November and December 1988.

Silicone resins in primary forms categorized as fluids and emulsions accounted for \$2.6 million or 36 per cent of the total value. High-consistency silicone rubber was the second major category, accounting for \$2.4 million or 34 per cent of the total value. Unit prices for these two types ranged from a low of \$0.57 to a high of \$50.10 per lb., resulting in an overall average unit price of \$1.97 per lb. The average unit price for all types of silicone resins in primary forms was \$2.07 per lb. For further details refer to Appendix A.

SUMMARY OF IMPORTS BY TYPE

| Type ⁽¹⁾ | Price Range (\$/lb) | | Quantity (000lbs) (000kg) | | Value (\$000) | Average Unit Price (\$/lb) |
|--|------------------------|--------|------------------------------|----------------------|------------------|----------------------------------|
| | Low | High | | | | |
| Fluids & emulsions | 0.89 | 48.45 | 1 457 | 661 | 2 581 | 1.77 |
| High consistency silicone rubber | 0.57 | 50.10 | 1 087 | 493 | 2 449 | 2.25 |
| High temperature resins and resin intermediates | 0.79 | 21.42 | 110 | 50 | 363 | 3.30 |
| Silicone coatings and dispersions | 1.91 | 47.72 | 70 | 32 | 299 | 4.27 |
| Silicone antifoam compounds and emulsions | 0.61 | 19.64 | 204 | 93 | 272 | 1.33 |
| Silicone glycols | 2.23 | 28.03 | 61 | 28 | 166 | 2.72 |
| Low consistency silicone rubber (1 part) | 1.31 | 39.05 | 24 | 11 | 153 | 6.38 |
| Low consistency silicone rubber (2 part) | 1.29 | 47.92 | 20 | 9 | 119 | 5.95 |
| Silicone compounds and greases | 2.17 | 16.98 | 8 | 4 | 52 | 6.50 |
| Type not known | 0.08 | 211.03 | 362 | 164 | 595 | 1.64 |
| Type and quantity not known | | | - | - | 54 | - |
| TOTAL | | | 3 402 ⁽²⁾ | 1 543 ⁽²⁾ | 7 103 | |

(1) In most instances silicone resins in primary forms were identified by product numbers or trade names. The products have been grouped above in categories as suggested by industry sources.

(2) Total of known quantities

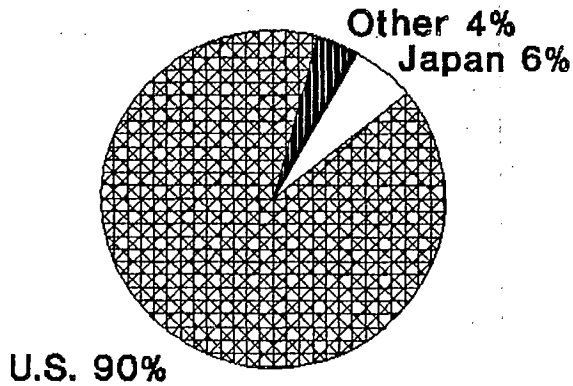
II. ANALYSIS OF IMPORTS (Cont'd)
SILICONE RESINS IN PRIMARY FORMS
BY COUNTRY OF ORIGIN

OCTOBER, NOVEMBER AND DECEMBER 1988

Imports of silicone resins in primary forms originating from the United States accounted for 3.1 million lbs. for a value of \$6.5 million or 90 and 91 per cent respectively of the total quantity and value.

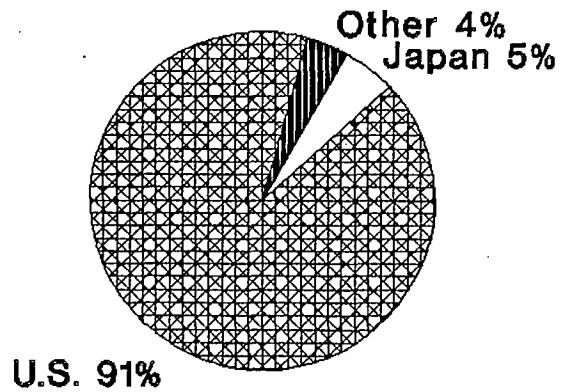
Other countries in descending order of dollar value of imports were: Japan, Federal Republic of Germany, France and the United Kingdom.

Quantity



100% = 3.4 Million lbs.

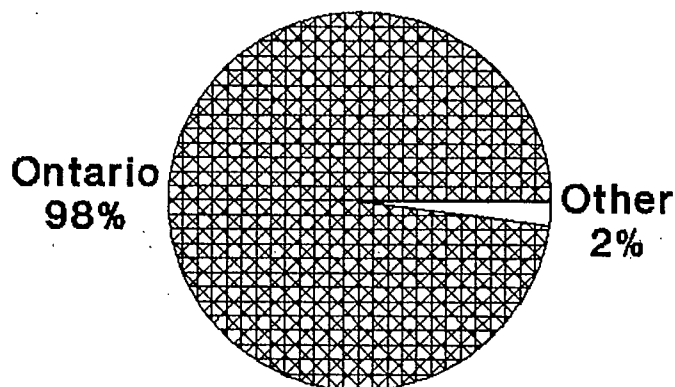
Value



100% = \$7.1 Million

II. ANALYSIS OF IMPORTS (Cont'd)
SILICONE RESINS IN PRIMARY FORMS
BY PROVINCE OF CONSIGNEE
OCTOBER, NOVEMBER AND DECEMBER 1988

Ontario was the major province of consignee for imports of silicone resins in primary forms accounting for \$7 million or 98 per cent of the total value.



100% = \$7.1 Million

OTHER: Québec and British Columbia

II. ANALYSIS OF IMPORTS (Cont'd)
SILICONE RESINS IN PRIMARY FORMS
IMPORT MARKET CONCENTRATION
OCTOBER, NOVEMBER AND DECEMBER 1988

| <u>Principal Consignees/Importers</u> (By Value) | <u>Cumulative Value</u> (\$000) | <u>Cumulative % of Total Value</u> |
|---|--|--|
| 3 | 5 836 | 82 |
| 6 | 6 549 | 92 |
| 10 | 6 803 | 96 |
| All Consignees/ Importers (59) | 7 103 | 100 |

There were 59 known consignees/importers of silicone resins in primary forms during the period October, November and December 1988. The top six consignees/importers accounted for \$6.5 million or 92 per cent of the total dollar value of imports. All consignees/importers are listed in alphabetical order in Appendix B.

III. CANADIAN PRODUCTION

According to departmental sources, Silicone Resins in primary forms are not manufactured in Canada.

SILICONE RESINS (IN PRIMARY FORM)

IV. MARKET SUMMARY

Silicone is a valuable polymer used in moderation in industrial societies in such applications as; construction adhesives, bathroom caulking, auto and residential window caulking, window (automobile and residential) caulking, automobile gasketing, antifoaming agents in petroleum, gas and chemical industries, plastic and rubber products, release coatings, special greases for machinery and electrical insulators.

The usefulness of compounded or formulated silicone products is based upon several exceptional valuable properties; little change in viscosity with temperature, high lubricity, low surface tension, good electrical properties, inertness and weather resistance.

In Northern America the demand for all types of silicone resins is approximately two million tonnes per year. Compounded silicones make up roughly ten thousand tonnes, or 0.5 per cent of the silicone resin total. (In comparison, commodity polyolefine resins make up some 40 per cent of the total). Demand in this region for compounded silicones is growing at four to five per cent per year.

Canadian per-capita consumption of compounded silicones, at 1.08 pounds per person, appears to be 94 per cent of U.S. consumption.

Silicones are mostly manufactured in the three major industrial regions: the United States, Western Europe and Japan. Only a limited number of manufacturers (3 in the United States, 6 in Western Europe and 3 in Japan) are engaged globally in all or some of the following stages of manufacture of about 150 grades of the saleable product; (1) silicon metal; (2) monomers, consisting mostly of organosilanes; (3) polymers in primary form; (4) compounds or formulations; (5) packaging for retail or industrial customers, mostly in tubes.

The majority of the manufacturers in the major industrial regions are vertically integrated and produce all of the above intermediary products. However, in Canada, only one producer (CSL Silicones Inc. at Guelph, Ontario) produces most of the above intermediate products from imported monomers, diluents and additives. The latter company supplies a minor portion of the Canadian market for silicone products.

Imported polymer, subsequently compounded into final products by subsidiaries of four major U.S. manufacturers (Dow-Corning, General Electric, Rhone-Poulenc and Wacker), and imported packaged silicone products supply the remaining Canadian market.

Silicones are generally broadly subdivided into three main types: fluids, elastomers and resins. The import statistics analyzed for this report classify the imports into ten types as chosen by representatives of the industry segment in Canada and described on page 7.

It is probably pertinent to point out the increased value of the various intermediate products:

| Intermediate product | Wholesale selling price index (Monomers = 100) |
|----------------------|---|
| Silicon metal | Less than 60 |
| Monomers | 100 |
| Polymers | 110 - 120 |
| Compounds | 150 - 200 |
| Packaged products | |
| - wholesale | 200 - 500 |
| - retail | 600 - 1500 |

In general, silicone packaged products are quite expensive with wholesale prices of \$ 1.25 to \$ 5 per pound and retail prices at \$ 5 to \$ 25 per pound, in U.S. dollars.

This import analysis provides data on imports of silicone resin and compounds, but not, unfortunately, imports of packaged silicone products. Thus, the full size of the Canadian market for silicone resins is not available from this publication. This analysis may be useful in appraising potential additional manufacture of silicone polymer and compounds in Canada in the light of recent demand. It is unlikely that the commercial production of silicone monomers can be justified in the next decade. One manufacturer is investigating the manufacture of silicon metal in Manitoba at present that can be used for the synthesis of silicone polymers.

**IMPORTS OF
SILICONE RESINS IN PRIMARY FORMS
BY TYPE AND PRICE RANGE
OCTOBER, NOVEMBER AND DECEMBER 1988**

| <u>Type</u> | <u>Price Range</u> (\$/lb) | <u>Quantity</u> | | <u>% of Total</u> <u>Quantity</u> | <u>Value</u> (\$) | <u>% of Total</u> <u>Type Value</u> |
|----------------------|-------------------------------|-----------------|------------|--------------------------------------|----------------------|--|
| | | (lbs) | (kg) | | | |
| Fluids and Emulsions | 0.50 to 1.49 | 724 545 | 328 652 | 50 | 684 202 | 34 |
| | 1.50 to 1.99 | 348 211 | 157 948 | 24 | 582 203 | 23 |
| | 2.00 to 2.49 | 195 232 | 88 557 | 13 | 461 137 | 18 |
| | 2.50 to 2.99 | 133 066 | 60 358 | 9 | 354 450 | 14 |
| | 3.00 to 3.49 | 12 787 | 5 800 | 1 | 41 517 | 2 |
| | 3.50 to 4.49 | 8 318 | 3 773 | 1 | 33 687 | 1 |
| | 4.50 to 4.99 | 4 571 | 2 073 | * | 21 718 | 1 |
| | 5.00 to 5.99 | 16 515 | 7 491 | 1 | 95 212 | 4 |
| | 6.00 to 6.49 | 4 984 | 2 261 | * | 30 869 | 1 |
| | 6.50 to 7.49 | 4 551 | 2 064 | * | 30 302 | 1 |
| | 7.50 to 9.99 | 2 950 | 1 338 | * | 27 937 | 1 |
| | 10.00 to 11.00 | 254 | 115 | * | 2 574 | * |
| | OVER 11.00 | <u>752</u> | <u>341</u> | <u>*</u> | <u>14 774</u> | <u>*</u> |
| | SUB TOTAL | | 1 456 736 | 660 771 | 100 | 2 580 582 |

* Less than one per cent.

**IMPORTS OF
SILICONE RESINS IN PRIMARY FORMS (Cont'd)
BY TYPE AND PRICE RANGE**

OCTOBER, NOVEMBER AND DECEMBER 1988

| <u>Type</u> | <u>Price Range</u> (\$/lb) | | <u>Quantity</u> | | <u>% of Total</u> <u>Quantity</u> | <u>Value</u> (\$) | <u>% of Total</u> <u>Type Value</u> |
|--|-------------------------------|-----------|-----------------|--------------|--------------------------------------|----------------------|--|
| | | | (lbs) | (kg) | | | |
| High consistency silicone rubber | 0.50 to 1.49 | | 9 940 | 4 509 | 1 | 8 877 | * |
| | 1.50 to 1.99 | | 733 205 | 332 580 | 68 | 1 288 197 | 53 |
| | 2.00 to 2.49 | | 170 322 | 77 258 | 16 | 397 852 | 16 |
| | 2.50 to 2.99 | | 73 780 | 33 466 | 7 | 196 496 | 8 |
| | 3.00 to 3.49 | | 59 243 | 26 872 | 5 | 194 505 | 8 |
| | 3.50 to 4.99 | | 12 665 | 5 745 | 1 | 54 707 | 2 |
| | 5.00 to 5.99 | | 3 860 | 1 751 | * | 21 345 | 1 |
| | 6.00 to 7.99 | | 3 685 | 1 672 | * | 25 149 | 1 |
| | OVER 8.00 | | <u>19 352</u> | <u>8 878</u> | <u>2</u> | <u>262 192</u> | <u>11</u> |
| SUB TOTAL | | 1 086 052 | 492 630 | 100 | 2 449 320 | 100 | |
| High temperature resins and resin intermediates | 0.50 to 1.49 | | 33 524 | 15 206 | 30 | 45 345 | 13 |
| | 1.50 to 4.49 | | 44 597 | 20 229 | 41 | 149 417 | 41 |
| | 4.50 to 4.99 | | 9 720 | 4 409 | 8 | 44 254 | 12 |
| | 5.00 to 6.49 | | 18 262 | 8 284 | 17 | 95 885 | 26 |
| | 6.50 to 7.49 | | 3 485 | 1 581 | 3 | 24 540 | 7 |
| | OVER 8.00 | | <u>387</u> | <u>176</u> | <u>*</u> | <u>3 847</u> | <u>1</u> |
| | SUB TOTAL | | 109 975 | 49 884 | 100 | 363 288 | 100 |

* Less than one per cent.

**IMPORTS OF
SILICONE RESINS IN PRIMARY FORMS (Cont'd)
BY TYPE AND PRICE RANGE**

OCTOBER, NOVEMBER AND DECEMBER 1988

| <u>Type</u> | <u>Price Range</u> (\$/lb) | <u>Quantity</u> | | <u>% of Total</u> <u>Quantity</u> | <u>Value</u> (\$) | <u>% of Total</u> <u>Type Value</u> |
|---|-------------------------------|-----------------|------------|--------------------------------------|----------------------|--|
| | | (lbs) | (kg) | | | |
| Silicone coatings and dispersions | 2.00 to 50.00 | 69 951 | 31 730 | 100 | 298 895 | 100 |
| Silicone antifoam compounds and emulsions | 0.50 to 0.99 | 54 012 | 24 500 | 26 | 44 769 | 16 |
| | 1.00 to 1.49 | 101 190 | 45 899 | 50 | 113 392 | 42 |
| | 1.50 to 1.99 | 24 744 | 11 224 | 12 | 42 947 | 16 |
| | 2.00 to 2.49 | 15 539 | 7 048 | 8 | 34 749 | 13 |
| | 2.50 to 4.50 | 7 551 | 3 425 | 4 | 29 290 | 11 |
| | OVER 7.00 | <u>724</u> | <u>328</u> | <u>*</u> | <u>6 487</u> | <u>2</u> |
| | SUB TOTAL | | 203 760 | 92 425 | 100 | 271 634 |
| Silicone Glycols | 2.00 to 30.00 | 60 611 | 27 493 | 100 | 165 823 | 100 |
| Low consistency silicone rubber (1 part) | Up to 10.00 | 22 601 | 10 252 | 93 | 120 707 | 79 |
| | OVER 10.00 | <u>1 637</u> | <u>743</u> | <u>7</u> | <u>32 614</u> | <u>21</u> |
| | SUB TOTAL | 24 238 | 10 994 | 100 | 153 321 | 100 |
| Low consistency silicone rubber (2 part) | 1.00 to 4.99 | 13 544 | 6 144 | 67 | 44 478 | 37 |
| | 5.00 to 10.00 | 5 375 | 2 438 | 27 | 41 379 | 35 |
| | OVER 10.00 | <u>1 193</u> | <u>541</u> | <u>6</u> | <u>33 407</u> | <u>28</u> |
| | SUB TOTAL | 20 112 | 9 123 | 100 | 119 264 | 100 |

* Less than one per cent.

IMPORTS OF
SILICONE RESINS IN PRIMARY FORMS (Cont'd)

BY TYPE AND PRICE RANGE

OCTOBER, NOVEMBER AND DECEMBER 1988

| <u>Type</u> | <u>Price Range</u> (\$/lb) | <u>Quantity</u> | | <u>% of Total</u> <u>Quantity</u> | <u>Value</u> (\$) | <u>% of Total</u> <u>Type Value</u> |
|---------------------------------------|-------------------------------|-----------------|--------------|--------------------------------------|----------------------|--|
| | | (lbs) | (kg) | | | |
| Silicone compounds and greases | 2.00 to 4.99 | 924 | 419 | 11 | 2 959 | 6 |
| | 5.00 to 6.49 | 4 506 | 2 044 | 54 | 24 263 | 47 |
| | OVER 6.50 | <u>2 856</u> | <u>1 296</u> | <u>35</u> | <u>24 579</u> | <u>47</u> |
| | SUB TOTAL | 8 286 | 3 759 | 100 | 51 801 | 100 |
| Type Not Known | Under 1.00 | 46 460 | 21 074 | 13 | 19 277 | 3 |
| | 1.00 to 1.99 | 269 316 | 122 161 | 74 | 369 063 | 62 |
| | 2.00 to 3.99 | 24 017 | 10 894 | 7 | 61 087 | 10 |
| | 4.00 to 4.99 | 8 338 | 3 782 | 2 | 36 909 | 6 |
| | 5.00 to 5.99 | 3 301 | 1 497 | 1 | 18 444 | 3 |
| | 6.00 to 6.99 | 7 413 | 3 363 | 2 | 47 382 | 9 |
| | OVER 7.00 | <u>3 336</u> | <u>1 513</u> | <u>1</u> | <u>42 878</u> | <u>7</u> |
| SUB TOTAL - Type Not Known | 362 181 | 164 284 | 100 | 595 040 | 100 | |
| Type and Quantity Not Known | - | - | - | 54 178 | 100 | |
| TOTAL - All types | | 3 401 902 | 1 543 093 | 100 | 7 103 146 | 100 |

IMPORTS OF
SILICONE RESINS IN PRIMARY FORMS
BY COUNTRY OF ORIGIN
OCTOBER, NOVEMBER AND DECEMBER 1988

| <u>Country of Origin</u> | <u>Quantity</u> | | <u>% of Total Quantity</u> | <u>Value (\$000)</u> | <u>% of Total Value</u> |
|----------------------------------|-----------------|-----------|--------------------------------|--------------------------|-----------------------------|
| | (000lbs) | (000kg) | | | |
| United States | 3 078 | 1 396 | 90 | 6 451 | 91 |
| Japan | 206 | 93 | 6 | 337 | 5 |
| Federal Republic of Germany | 76 | 34 | 2 | 150 | 2 |
| France United Kingdom }* | <u>43</u> | <u>20</u> | <u>1</u> | <u>164</u> | <u>2</u> |
| TOTAL | 3 403 | 1 543 | 100 | 7 102 | 100 |

* Aggregated to preserve confidentiality of Canadian importers.

**CANADIAN IMPORTERS
SILICONE RESINS IN PRIMARY FORMS**

OCTOBER, NOVEMBER AND DECEMBER 1988

Importers of of Silicone Resins in primary forms during the period of October, November and December 1988, as indicated in this report, are listed below in alphabetical order. Where the importer is not the same as the consignee (i.e. the recipient of the goods shipped), the name of the consignee rather than that of the importer is listed. The importer or consignee is not necessarily the end-user of the product.

NOTE: This list includes all importers except individuals.

| <u>Name</u> | <u>Address</u> | <u>Name</u> | <u>Address</u> |
|--|----------------------|--|----------------------|
| A.G. Anderson Ltd. | London, Ont. | General Tire Canada Inc. | Barrie, Ont. |
| Amisol Inc. | Toronto, Ont. | Gillette of Canada Ltd. | Pte. Claire, Qué. |
| Acheson Colloids (Canada) Ltd. | Brantford, Ont. | Harbour Industries Ltd. | Farnham, Qué. |
| Artcast Inc. | Georgetown, Ont. | Henley Chemicals Ltd. | Scarborough, Ont. |
| Ayer Cliff Chemical Ltd. | Brantford, Ont. | Hoechst Canada Inc. | Montréal, Qué. |
| Bayer (Canada) Inc. | Mississauga, Ont | IBM Canada Ltd. | Bromont, Qué. |
| Blue Streak Hygrade Motor Products Ltd. | Mississauga, Ont. | Industrial Colours & Chemicals Ltd. | Brampton, Ont. |
| C.R. Industries of Canada Ltd. | Brantford, Ont. | International Hearing Aids Ltd. | Oakville, Ont. |
| Canada Colors and Chemicals Ltd. | Don Mills, Ont. | ITT Cannon Canada Ltd. | Whitby, Ont. |
| Canada Stamp & Stencil Co. Ltd. | Toronto, Ont. | Jergens Canada Inc. | Perth, Ont. |
| Canadian General Electric Co. Ltd. | Rexdale, Ont. | Korkay System Canada Ltd. | Gananoque, Ont. |
| Canadian International Chemicals Ltd. | Dorval, Qué. | Lemmerz Magna Inc. | Collingwood, Ont. |
| Carlin Products Co. Ltd. | Mississauga, Ont. | Les Industries Techno-Chem Ltd. | Laval, Qué. |
| Celanese Canada Ltd. | Kingston, Ont. | May & Baker Canada Ltd. | Mississauga, Ont. |
| Chempac Ltd. | Rexdale, Ont. | Mita Copystar Canada Ltd. | Mississauga, Ont. |
| Cosmair Canada Inc. | St. Laurent, Qué. | Mitsubishi Canada Ltd. | Toronto, Ont. |
| Decade Electronics Ltd. | Scarborough, Ont. | Perma Flex Inc. | Downsview, Ont. |
| Degussa Canada Ltd. | Burlington, Ont. | Pfizer Canada Inc. | Kirkland, Qué. |
| Devey & Almy Chemical Ltd. | Lasalle, Qué. | Rayonese Textile Inc. | St. Jérôme, Qué. |
| Dominion Controls Co. Ltd. | Stratford, Ont. | S.C. Johnston and Son Ltd. | Brantford, Ont. |
| Dominion Textile - Consumer Products Ltd. | Magog, Qué. | Silcofab Ltd. | Guelph, Ont. |
| Dominion Textile Inc. | Valleyfield, Qué. | Southwest Ontario Welding Supply Ltd. | London, Ont. |
| Dow Corning Canada Inc. | Mississauga, Ont. | Starkey Labs Canada Ltd. | Mississauga, Ont. |
| Dupont Canada Inc. | Kingston, Ont. | Techno Chemico International Ltd. | Montréal, Qué. |
| Eastern Precision Casting Inc. | Montréal, Qué. | Temp Building Specialties Ltd. | Burnaby, B.C. |
| Estee Lauder Cosmetics Ltd. | Scarborough, Ont. | Texall Inc. | Dorval, Qué. |
| Filtran Ltd. | Nepean, Ont. | Union Carbide Canada Ltd. | Etobicoke, Ont. |
| | | United Color & Chemical Ltd. | Montréal, Qué. |
| | | Varien Canada Inc. | Cornwall, Ont. |
| | | Xerox Canada Inc. | Georgetown, Ont. |
| | | | North York, Ont. |

**FOREIGN EXPORTERS TO CANADA
SILICONE RESINS IN PRIMARY FORMS**

OCTOBER, NOVEMBER AND DECEMBER 1988

Major exporters to Canada of Silicone Resins in primary forms are listed below in descending order of dollar value. These exporters accounted for 93 per cent of the total \$7.1 million analysed.

| <u>Name</u> | <u>Address</u> | <u>Value of Imports</u> (\$000) |
|--|---|------------------------------------|
| Dow Corning Corp. | Manchester, United Kingdom Midland, Michigan, U.S.A. | 2 717 |
| General Electric Co. Inc. Wacker Silicones Corp. | Waterford, New York, U.S.A.) Adrian, Michigan, U.S.A.) | 3 162* |
| Mitsubishi Corp. United Carbide Inter American Corp. Rhone-Poulenc Inc. | Tokyo, Japan) Danbury, Connecticut, U.S.A.) Monmouth Junction, N.J., U.S.A.) France | 716* |

* Aggregated to preserve confidentiality of Canadian importers.

CANADIAN SUPPLIERS
SILICONE RESINS IN PRIMARY FORMS

OCTOBER, NOVEMBER AND DECEMBER 1988

The following list is taken from the Business Opportunities Sourcing System (BOSS), a computerized data bank established by the Federal Department of Industry, Science and Technology Canada. This list may not include all suppliers of the products in question, as companies must themselves register in BOSS. Information of Canadian products supplied is as given by the companies.

BOSS

Canadian companies are arranged in alphabetical order.

Silicone Resins

| <u>Name</u> | <u>Address</u> |
|--|-----------------------|
| CSL Silicones Inc. | Guelph, Ont. |
| General Electric Canada Inc. | Mississauga, Ont. |
| Kaycan Ltée | St. Laurent, Qué. |
| Kleen-Flo Tumbler Ind. Ltd. | Brampton, Ont. |
| Paisley Products of Canada Inc. | Scarborough, Ont. |
| Spraytex Industries Ltd. | Scarborough, Ont. |
| Sternson Limited | Nisku, Alberta |
| Websen Technical Products (Canada) Ltd. | Vancouver, B.C. |

Any enquiries and/or comments regarding the BOSS list should be directed to:

Business Opportunities Sourcing System (ABOS)
Industry, Science and Technology Canada
235 Queen Street
Ottawa, Ontario K1A 0H5
Tel.: (613) 954-5031
Telex: 053-4123
Fax: (613) 954-1894

APPENDIX F

CANADIAN AND FOREIGN TARIFFS

Silicone Resins in primary forms included in this analysis were dutiable under the following Canadian tariff item.

| <u>Tariff Item</u> | <u>Description of Goods</u> | <u>Tariff Treatment</u> | | |
|--------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------|
| | | <u>Most Favoured Nation Tariff</u> | <u>General Preferential Tariff</u> | <u>United States Tariff</u> |
| 3910.00.00 | Silicones in primary forms | 7.1% | 4.5% | 5.6% |
| | - On and after January 1, 1990 | | | 4.2% |
| | - On and after January 1, 1991 | | | 2.8% |

Enquiries concerning tariffs should be directed to the nearest Customs and Excise office or to:

Tariff Programs
Revenue Canada
Customs and Excise
Ottawa, Ontario
K1A 0L5
Tel.: (613) 954-6904
Fax.: (613) 954-2509

FOREIGN COUNTRIES

Enquiries concerning tariffs and other government trade regulations in foreign countries should be directed to:

Info Export
External Affairs
Ottawa, Ontario
K1A 0G2
Tel.: (613) 993-6435 OR 1-800-267-8376
Fax.: (613) 996-9709