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United Nations Industrial Development Organization

United Nations Industrial Development Organization
of the Synthetic Rubber Industry
Geneva, February, 1954

INTRODUCTION

THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Geneva, February, 1954

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PRODUCTION AND UTILIZATION OF THE REMAINING OF SBR IN BRAZIL

IN 1951, THE MINISTER OF FINANCE OF BRAZIL DURING THE PRESIDENCY OF GETULIO VARGAS, MR. MARACIO LAFERRE RECEIVED FROM THE UNDERSIGNED THE FIRST PROJECT TO PRODUCE SBR IN BRAZIL, USING THE KNOW-HOW OF DOWEY & ALMY CHEMICAL CO., CAMBRIDGE - MASS. HOWEVER, DUE TO THE TRADITION IN BRAZIL OF THE TWO WORLDWIDE WELL-KNOWN MANUFACTURERS, FIRESTONE AND GOODYEAR, THE MINISTER DECIDED TO BRING FROM THE UNITED STATES, A TECHNICAL COMMISSION OF BOTH COMPANIES REPRESENTED BY MR. BARCOCK AND LYONS, AND BOTH PRESENTED A REPORT ABOUT THE PROBLEM.

NOTHING WAS DECIDED AT THAT TIME DUE TO THE RAW MATERIAL SITUATION. BUTADIENE HAD TO BE IMPORTED AND THE GOVERNMENT DECIDED TO WAIT THE CONSTRUCTION OF "REFINARIA DUQUE DE CAXIAS", PETROBRAS WAS AUTHORIZED BY THE GOVERNMENT, IN JUNE 2, 1958 TO GO AHEAD WITH THE PROJECT TO PRODUCE 40,000 TONS/YEAR OF SBR.

IN MARCH 1962, SBR WAS IN PRODUCTION AND IN 1965 A POLYBUTADIENE PLANT WAS INSTALLED IN THE STATE OF PERNAMBUCO (NORTHEAST OF BRAZIL) WITH A INSTALLED CAPACITY OF 27,000 TONS/YEAR USING UNION CARBIDE'S KNOW-HOW PRODUCING BUTADIENE FROM ALCOHOL.

COPOLIMORIZATION UNITS

IN MARCH 1962 USING THE KNOW-HOW OF FIRESTONE AND GOODYEAR, THE PROJECT WAS APPROVED FOR 40,000/YEAR.

BUTADIENE UNIT (REFINARIA DUQUE DE CAXIAS)

IN OPERATION DURING THE YEAR OF 1967 USING THE HOUDRY PROCESS, 33,000 TONS/YEAR INSTALLED CAPACITY. WHEN ONLY BUTANE WAS USED AND 42,000 WITH BATCHES OF 50% BUTANE AND 50% BUTYLENE.

| YEAR | BR LATEX TONS NETTED | TOTAL | PERCENTAGE (%) | |
|------|----------------------------|-------|----------------|---------------|
| | | | TOTAL | BR LATEX TONS |
| 1968 | 52,340 | 74,2 | 70,5 | 59,6 |
| 1969 | 51,067 | 71,8 | 71,1 | 57,2 |
| 1970 | 62,156 | 73,4 | 74,5 | 60,2 |
| 1971 | 67,044 | 68,9 | 77,0 | 60,4 |
| 1972 | 73,000 | 70,5 | 102,000 | 50,5 |

THE MARKET SHARE OF SBR HAS BEEN GAINING A POSITION YEAR BY YEAR FOLLOWING PRACTICALLY THE SAME PERCENTAGE OF CONSUMPTION BASED ON TOTAL SYNTHETIC RUBBER OF THE WELL DEVELOPED COUNTRIES.

PETROBRAS IN ITS FIRST YEAR OF OPERATION PRODUCED 5,000 TONS, INCREASING YEARLY THE PRODUCTION REACHING IN 1968, 50,000 TONS AND 77,480 IN 1972.

THERE IS A DIRECT PROPORTION OR RELATION BETWEEN THE GNP AND THE CONSUMPTION PER CAPITA OF SYNTHETIC RUBBER. THIS WAS WELL DEMONSTRATED IN THE PAPERS PRESENTED DURING THE MEETING HELD IN VIENNA DURING THE MONTH OF MARCH 1972 BY DR. A. SMITH OF DUNLOP EXPORT COMPANY.

NEW PROJECTS

BUTYL AND POLYISOPRENE WILL BE THE NEXT POLYMER TO BE PRODUCED IN BRAZIL. THE CONSTANT INCREASE OF THE AUTO INDUSTRY PRODUCTION, 700,000 CARS ARE EXPECTED TO BE PRODUCED THIS YEAR, BEING RESPONSIBLE FOR THE INCREASE OF THE CONSUMPTION OF BUTYL ELASTOMERS FOR BLADDERS. PROBABLY IN THE NEAR FUTURE A PROJECT TO PRODUCE CHLOROPRENE WILL BE CONSIDERED, HOWEVER IT IS ONLY IN THE PRELIMINARY STAGE.





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