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THE DEVELOPMENT OF THE PLASTICS INDUSTRY IN URUGUAY[1]

by

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We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

Uruguay, with an area of 187,000 square kilometres, has a population of some three million inhabitants with a high standard of literacy and consumer requirements. It was formerly regarded as the Switzerland of South America with important Banking and Commercial facilities and a very conscious programme of social reform. Unfortunately, aspirations outstripped resources, scant regard was paid to the falling price of wool which is the principal export, followed by beef, and a civil service said to represent in one way or the other half the working population of the country, has contributed to catastrophic inflation. The country today is in poor financial straits, but cautious optimism is justified for the future. Wool prices have hardened, beef production is improving and the country is developing an important tourist industry.

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The Uruguayan plastics market, which has developed over the last 20 years, is characterized by having a high consumption per capita of, principally, polyethylene and PVC and, in a lesser degree, polystyrene, MM, polypropylene, etc.

Production is "atomized", there being at present some 250 firms dedicated to moulding, some of which work with equipment which in other places would be used only at laboratory level. The raw material is totally imported, there being no local production. Sources of supply are varied, i.e. Germany, England, U.S.A., Japan, Italy, etc. At times when availability of the raw material is normal there is acute price competition.

At present demand cannot be satisfied as a result of the world shortage of raw material and (to a much lesser degree) the control and limitations in the granting of import quotas imposed by the local authorities. Despite this, in the course of the present year appreciable imports of both PE and PVC have been recorded and, if the present rhythm is maintained, import figures might exceed those of the year of biggest consumption (1970).

The contribution which was expected from the neighbour countries, Brazil and Argentina, has resulted practically negligible.

In Argentina the domestic demand has by far exceeded local production in both PE and PVC, theprocessors being unable to purchase from other countries as a result of the very heavy surcharges applied to imports as a protection for the local industry. Due to this, and to the high internal selling prices (PE is being marketed at U$S 1.00 per kilo, while the international level is around U$S 0.50 per kilo) the plastic market has not had the expected development and consumption per capita is well below that of Uruguay. As a logical consequence, there are no surplus quantities for export to this country. Only in 1976 could the Bahía Blanc super petrochemical complex (private and government investment) come into full operation, solving in this way, it is hoped, the present critical situation.

Brazil, with a very big consumer market, is also unable to meet its home demand. Recently, due to the technical failure suffered by an important international enterprise - they could not put into operation a new plant with a very big production capacity due to engineering problems - the hopes of obtaining supplies of Brazilian PE in the near future have vanished.

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We give hereunder a brief resumé of the market for the principal plastics that are transformed in Uruguay:

POLYETHYLENE

I) **Imports** (in tons):

	1970 (x)	1971	1972	1973 (6 months)
LD	5500	4900	4800	2560
HD	1300 .	1200	1050	950

(x) Year of biggest consumption up to the present.

II) Principal applications:

LDPE	60%	tubular film for bags, etc.
	28%	extrusion/blown (packs, toys, cold water pipes)
	12%	injection (toys, table service, kitchen utensils, etc.)
HDPE	57%	extrusion/blown (packs, jerrycans, cold water pipes, etc.)
	24%	artificial raffia, monofilaments, etc.
	19%	injection (kitwhen ware, washbowls, buckets).

POLYVINYL CHLORIDE (PVC)

I) Imports (in tons):

1970	1971	1972	1973 (6 months)
2100	1750	1850	1350

II) Principal applications

Type

a) Suspension	10%	shoes, boots, etc.
	5%	Venetian blinds
	21%	rigid tubing
	2%	floor covering (tiles)
	8%	insulation for electric conductors
	9%	flexible extrusion in general (ribbon, weather stripping, hose, etc.
	19%	leathercloth (calendering)
	2%	rigid injection
b) Emulsion (pastes)	16%	cloth coverings, toys
c) Copolymers	8%	gramophone records, adhesives, floors (tiles).

We wish again to stress the big consumption per capital in our market, which with barely 3 million inhabitants transforms 6,000 tons of PE and 2,000 tons of PVC per annum.

POLYSTYRENE

I) Imports (in tons):

1970	1971	1972
1070	1420	1300

II) Principal applications:

a) General use — Toys, trays, glasses (injection).

b) High Impact — Sheets for refrigerator linings, glasses, saucers, etc. (by extrusion/vacuum forming) toys.

Prospects for future development are largely dependent on the petrochemical complex to be installed in Bahía Blanca (Argentina) which, supplying us with Ethylene, would allow us to achieve our aim of local production.

The possibility of locating under-sea oil in the Uruguayan continental shelf also generates great hopes. The investigations carried out by international specialists appear to confirm the existence, but there has been no official authorized statement as yet to this effect.

The object of our participation in the IV Training Programme in Plastics Technology is to obtain the greatest possible information as regards practical work, testing and control techniques, both in synthesis and processing of plastics.

The experience to be gained, as well as the contacts to be made with manufacturers of resins and equipment, are considered of fundamental importance for the local production plans which it is hoped to put into effect in the near future.

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