UNITED STATES OF AMERICA
BEFORE FEDERAL TRADE COMMISSION

In the Matter of	)	
MACDERMID, INC., a corporation,	)	
and	)	**Docket No. C-3911**
POLYFIBRON TECHNOLOGIES, INC., a corporation.	)	

COMPLAINT

The Federal Trade Commission ("Commission"), having reason to believe that MacDermid, Inc. has agreed to acquire Polyfibron Technologies, Inc., both corporations subject to the jurisdiction of the Commission, in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18, and Section 5 of the Federal Trade Commission Act ("FTC Act"), as amended, 15 U.S.C. § 45; and it appearing to the Commission that a proceeding in respect thereof would be in the public interest, hereby issues its Complaint, stating its charges as follows:

I. RESPONDENTS

1. Respondent MacDermid, Inc. ("MacDermid") is a corporation organized, existing, and doing business under and by virtue of the laws of the State of Connecticut, with its executive offices located at 245 Freight Street, Waterbury, Connecticut 06702.

2. Respondent Polyfibron Technologies, Inc. ("Polyfibron") is a corporation organized, existing, and doing business under and by virtue of the laws of the State of Delaware, with its office and principal place of business located at 900 Middlesex Turnpike, Building 2, Billerica, Massachusetts 01821-3946.

3. For purposes of this proceeding, Respondents are, and at all times relevant herein have been, engaged in commerce as "commerce" is defined in Section 1 of the Clayton Act, as

amended, 15 U.S.C. § 12, and are corporations whose businesses are in or affecting commerce as "commerce" is defined in Section 4 of the FTC Act, as amended, 15 U.S.C. **§** 44.

II. THE ACQUISITION

4. Pursuant to a Plan and Agreement of Merger dated February 18, 1999, MacDermid will acquire all of the voting securities of Polyfibron for approximately $299 million ("the Acquisition").

III. THE RELEVANT MARKETS

5. One relevant line of commerce in which to analyze the likely effects of the proposed Acquisition is the research, development, manufacture and sale of liquid photopolymers for use in the production of printing plates for the packaging industry ("Liquid Photopolymers"). Printing plates made from Liquid Photopolymers are essential to the printing of relatively simple graphics on packaging materials, such as, for example, graphics that identify the kind, source and weight of particular goods contained in multi-wall bags and corrugated containers. Liquid Photopolymers provide customers with an inexpensive, flexible and environmentally safe material for manufacturing printing plates for printing on packaging materials. There are no economic substitutes for Liquid Photopolymers to which customers would switch in response to a small but significant price increase in Liquid Photopolymers.

6. Another relevant line of commerce within which to analyze the likely effects of the proposed transaction is the research, development and sale of solid sheet photopolymers for use in the production of printing plates for the packaging industry ("Sheet Photopolymers"). Printing plates made from Sheet Photopolymers are essential to the printing of sophisticated graphics on packaging materials, such as, for example, the printing of multi-colored designs, logos and photograph-quality prints on folding cartons for consumer products, as well as multi-wall bags and corrugated containers. Sheet Photopolymers provide customers with a consistently high quality, inexpensive material for printing sophisticated graphics on packaging materials. There are no economic substitutes for Sheet Photopolymers to which customers would switch in response to a small but significant price increase in Sheet Photopolymers.

7. For purposes of this Complaint, the relevant geographic area in which to analyze the effects of the proposed Acquisition on competition in Liquid Photopolymers and Sheet Photopolymers is North America. Liquid Photopolymers and Sheet Photopolymers produced outside North America are not economic substitutes because of customers' need for local sales and technical service support, because the delays and uncertainties inherent in long-distance shipping are unacceptable to customers in an industry that requires just in time delivery, and, in the case of Liquid Photopolymers, because of the high shipping costs associated with a relatively low-value product consisting largely of water. There are no significant sources of imports of

Liquid Photopolymers or Sheet Photopolymers, and no substantial import or export response to exchange rate fluctuations.

IV. MARKET STRUCTURE

8. The Liquid Photopolymer market is very highly concentrated, whether measured by the Herfindahl-Hirschman Index ("HHI") or by two-firm concentration ratios. MacDermid and Polyfibron are the two largest sellers of Liquid Photopolymers in North America, controlling approximately 99 percent North American sales. The proposed Acquisition thus represents a virtual merger to monopoly.

9. The Sheet Photopolymer market is very highly concentrated, whether measured by the HHI or two-firm concentration ratios, with Polyfibron and E.I. du Pont de Nemours and Company ("DuPont") together controlling over 90 percent of North American sales. Polyfibron's share of the North American market includes sales of its own manufactured Sheet Photopolymers, as well as its sales of Sheet Photopolymers manufactured by BASF Drucksysteme GmbH ("BASF," formerly known as BASF Lacke + Farben AG), pursuant to a distribution agreement dated August 25, 1995 between BASF and NAPP Systems, Inc., a subsidiary of Polyfibron. While MacDermid does not manufacture Sheet Photopolymers, it has the exclusive right, under a December 14, 1998 agreement with Asahi Chemical Industry Co., Ltd. ("Asahi"), to distribute Asahi's Sheet Photopolymers in North America. Along with DuPont, Polyfibron and BASF, Asahi is one of the major producers of Sheet Photopolymers in the world.

10. Entry into the relevant markets requires significant sunk costs and would not be timely, likely and sufficient to deter or counteract the adverse competitive effects described in Paragraphs 11 - 12 because of, among other things: the length of time and expense necessary to build appropriate chemical production facilities; the difficulty of acquiring the technical expertise necessary to produce commercial-quality polymers at the quantities and consistency required by customers; the difficulty of acquiring research and development capabilities necessary to be able to offer customers continuing innovation; the need to offer to customers plate-making equipment on a consignment or lease basis; and the difficulty of gaining recognition in a marketplace in which customers are reluctant to change from proven suppliers. Furthermore, most customers in the market are engaged in long-term equipment lease and material supply contracts with either MacDermid or Polyfibron, further reducing the market available to a new entrant at any given time. Thus, it is unlikely that a new entrant could enter successfully so as to counteract a small but significant price increase.

IV. EFFECTS OF THE ACQUISITION

11. The effect of the Acquisition may be substantially to lessen competition and to tend to create a monopoly in the relevant markets in violation of Section 7 of the Clayton Act, as

amended, 15 U.S.C. § 18, and Section 5 of the FTC Act, as amended, 15 U.S.C. § 45, in the following ways, among others:

a. It will eliminate actual, direct and substantial competition between Polyfibron and MacDermid in the relevant market for Liquid Photopolymers;

b. It will substantially increase the level of concentration, to the point of creating a monopoly, in the relevant market for Liquid Photopolymers;

c. It will increase the likelihood that the firm created by the merger of MacDermid and Polyfibron will unilaterally exercise market power in the relevant market for Liquid Photopolymers;

d. It will increase the likelihood that purchasers of Liquid Photopolymers in the relevant market will be forced to pay higher prices;

e. It will increase the likelihood that technical and sales services provided to purchasers of Liquid Photopolymers in the relevant market will be reduced;

f. It will increase the likelihood that innovation in the development of Liquid Photopolymers will be reduced;

g. It will eliminate the strong potential for direct and substantial competition between and among Polyfibron, BASF and Asahi in the relevant market for Sheet Photopolymers due to the exclusive distribution agreements between Polyfibron and BASF and between MacDermid and Asahi, and thereby further entrench the existing duopoly;

h. It will significantly enhance the likelihood of coordinated interaction in the relevant market among the competitors in the production and sale of Sheet Photopolymers; and

i. It will increase barriers to entry in the relevant markets.

12. All of the above increase the likelihood that the Acquisition would result in increased prices, reduced innovation, or reduced services in the near future and in the long term in the relevant markets.

V. ANTICOMPETITIVE CONDUCT

13. In 1972, Hercules, Inc. ("Hercules"), entered into a licensing arrangement with Asahi for the manufacture of Liquid Photopolymers, which license was fully paid up and expired in 1989. The applicable Asahi patents expired in or about 1990, and Hercules was free thereafter to manufacture Liquid Photopolymers pursuant to the Asahi technology without restriction. In 1995, MacDermid acquired the printing business of Hercules, and continued to produce Liquid Photopolymers, without any transfer or sharing of technology with Asahi. In 1995, shortly after MacDermid's acquisition of Hercules' printing business, Asahi expressed to MacDermid's Business Director its interest in maintaining its understandings with MacDermid, as the acquirer of the Hercules liquid photopolymer business.

14. From 1995 through December 1998, MacDermid and Asahi engaged in continuing discussions and correspondence which repeatedly confirmed the parties' understanding that Asahi would not compete in the sale of Liquid Photopolymers in North America while MacDermid would not compete in the sale of Liquid Photopolymers in Japan. Since the expiration of the Asahi/Hercules license agreement in 1989, Asahi has in fact not competed in the sale of Liquid Photopolymers in North America, while MacDermid has not competed with Asahi in the sale of Liquid Photopolymers in Japan. Although the earlier licensing agreement between Hercules and Asahi may have been justified as a reasonable agreement to transfer technology, the continued understanding between MacDermid and Asahi had the purpose and effect of allocating or dividing territories or markets for the manufacture and sale of Liquid Photopolymers, and restricting competition, including price competition, between MacDermid and Asahi.

15. Also from 1995 through 1998, Polyfibron engaged in continuing discussions with Asahi. Correspondence between the two companies, and internal Polyfibron memoranda, identify the goal of such discussions as an agreement that Polyfibron not enter the Japanese markets for the sale of Liquid Photopolymers and Sheet Photopolymers, and that Asahi not enter the North American markets for the sale of Liquid Photopolymers and Sheet Photopolymers. In the course of the discussions that took place between Polyfibron and Asahi during 1997, Polyfibron, on several occasions, invited Asahi to agree not to compete in the sale of Sheet Photopolymers and Liquid Photopolymers in North America in return for Polyfibron's agreement not to compete in the sale of Liquid Photopolymers and Sheet Photopolymers in Japan. These invitations, if consummated, would have had the purpose and effect of allocating or dividing markets for the manufacture and sale of Liquid Photopolymers and Sheet Photopolymers, and restricting competition, including price competition, between Polyfibron and Asahi.

VI. VIOLATIONS CHARGED

16. The acquisition agreement described in Paragraph 4 constitutes a violation of Section 5 of the FTC Act, as amended, 15 U.S.C. § 45.

17. The Acquisition described in Paragraph 4, if consummated, would constitute a violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18, and Section 5 of the FTC Act, as amended, 15 U.S.C. § 45.

18. The agreement between MacDermid and Asahi described in Paragraphs 13 and 14 violates Section 5 of the FTC Act, as amended, 15 U.S.C. § 45.

19. The acts and practices of Polyfibron described in Paragraph 15 constitute unfair methods of competition in or affecting commerce in violation of Section 5 of the FTC Act, as amended, 15 U.S.C. § 45.

IN WITNESS WHEREOF, the Federal Trade Commission has caused this Complaint to be signed by the Secretary and its official seal to be affixed, at Washington, D.C. this twenty-first day of December, 1999.

By the Commission.

Donald S. Clark
Secretary

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