TABLE 1-4 Shipments of Adhesives and Sealants by Class of Manufactuer 2002

Millions of Dollars			
Industry Shipments		*Product Shipments*	
Primary products	$6,351.8	Primary products	$6,351.8
Secondary products	537.6	Shipments by companies in other industries	855.2
Value of resales	326.9		
Contract receipts	4.8	Total	$7,207.0
Other miscellaneous receipts	5.9		
Total	$7,227.1		

Source: *Economic Census*.

Other than the *Guide*, the Bureau of the Census publishes the most extensive data on shipments of adhesives and sealants in the *Annual Survey of Manufactures* and in the *Economic Manufactures*, published every five years. The last *Census of Manufactures* covering activity in 2002 was published in mid 2004. The value of shipments as outlined in the *Census* includes adhesives and sealants from all manufacturers regardless of their primary manufacturing classification. Table 1-4 shows that in 2002 (the latest year available), shipments of primary products and resales are 87.9% of industry. Other manufacturers who make adhesives and sealants as a secondary operation produce the balance. Such manufacturers include companies whose primary activity is manufacturing plastics, paints, fabricated rubber products, and other items.

The adhesives and sealants industry is a mature business that is highly fragmented by types of products, end uses, and technology. It is changing along with slow growth and many grades becoming commodity-type products. Due to emissions regulations, considerable effort continues to be spent to develop waterborne and radiation curable products. Therefore, it is very competitive, which causes constant acquisitions and consolidation. Factors causing this trend are costs of shipping, difficulties in maintaining prompt deliveries to distant locations, and other distribution problems.

INDUSTRY SHIPMENTS

As shown in Table 1-5, the value of shipments of adhesives and sealants reached an estimated $6,987 million in 2002 as reported in the *Economic Census*. This compares to $11,002 million for adhesives and sealants as determined in this Guide for 2003. As noted earlier, government data are lower than the estimates in the Guide, but nevertheless, the trend shows the growth of the various product forms.

Synthetic resins and sealants account for 61% of sales and natural base glues and adhesives for 3%. Caulking compounds and sealants represent 21% of total shipments, and structural sealants, 7%. The balance is products "not elsewhere classified".

Between 1997 and 2002, sales of the industry as reported in the *Economic Census* declined by 5.5%, or an average of 1.1% per year. The drop in shipments in 2002 was due in large part to the economic recession that was particularly severe in the manufacturing sector of the U.S. economy. Synthetic resins and rubber adhesives declined by an average of 5.5% a year while caulking compounds and sealants

TABLE 1-5 U.S. Merchant Shipments of Adhesives and Sealants 1967-2002

Million Dollars								
Year	*Synthetic Resin and Rubber Adhesives*	*Natural Base Glues and Adhesives*	*Caulking Compounds and Sealants*	*Structural Sealants-a*	*General Purpose*	*Adhesives and Sealants NSK*	*Total*	*% Increase*
1967	$356.6	$98.4	$68.3	—	—	$24.4	$547.7	—
1972	671.8	119.5	121.2	—	—	41.7	954.3	—
1977	1,221.8	166.4	364.4	—	—	120.5	1,873.1	—
1982	1,833.8	177.5	602.8	—	—	288.9	2,903.0	5.8%
1987	2,825.8	154.2	863.8	$226.6	$637.2	706.5	4,550.4	22.5
1988	3,100.8	172.8	847.7	208.0	639.7	723.5	4,844.7	7.4
1989	3,298.7	235.6	834.7	205.7	629.0	765.1	5,134.1	6.0
1990	3,313.8	233.8	940.9	223.5	717.4	914.1	5,402.6	5.2
1991	3,455.7	220.4	920.5	226.5	694.0	785.1	5,381.6	−0.3
1992	3,555.4	189.5	1,155.0	343.5	811.5	499.4	5,399.1	0.3
1993	3,719.1	246.5	1,316.9	405.9	911.0	524.4	5,807.0	7.5
1994	3,545.8	410.1	1,156.4	444.3	712.1	314.1	5,426.5	−6.6
1995	3,669.8	468.6	1,187.2	449.4	737.8	268.1	5,593.7	3.0
1996	4,205.9	487.4	1,161.0	458.3	702.7	287.0	6,141.3	9.7
1997	4,338.1	322.9	1,436.1	495.7	—	781.4	7,374.5	11.6
1998	4,194.6	354.5	1,389.5	352.1	—	1,011.5	7,307.1	−1.0
1999	4,502.8	704.3	1,530.1	412.1	—	704.6	7,854.0	7.4
2000	4,797.6	791.0	1,409.9	448.7	—	433.5	7,880.8	0.3
2001	4,831.4	782.0	1,564.4	248.2	—	264.5	7,690.5	−2.5
2002	4,227.6	204.1	1,477.5	526.2	—	552.0	6,987.3	−9.1

TABLE 1-6 Increases in U.S. Merchant Shipments of Adhesives and Sealants 1967-2002

Percent per year								
Years	*Synthetic Resin and Tubber Adhesives*	*Natural Base Glues and Adhesives*	*Caulking Compounds and Sealants*	*Structural Sealants-a*	*General Purpose*	*Adhesives and Sealants NSK*	*Total*	*% Increase*
1982-87	9.0%	−7.5%	6.2%	—	—	26.5%	9.3%	—
1987-92	4.7%	4.2%	6.0%	8.7%	5.0%	2.7%	2.2%	—
1990-95	3.9%	4.8%	4.1%	12.1%	0.8%	−1.8%	4.4%	—
1997-02	−0.6%	−9.8%	0.6%	1.2%	—	−7.1%	−1.1%	—

a- Includes some captive production for interplant transfers.

b- Load bearing.

Sources: *Economic Census; Annual Survey of Manufactures;* and *estimates by Impact Marketing Consultants.*