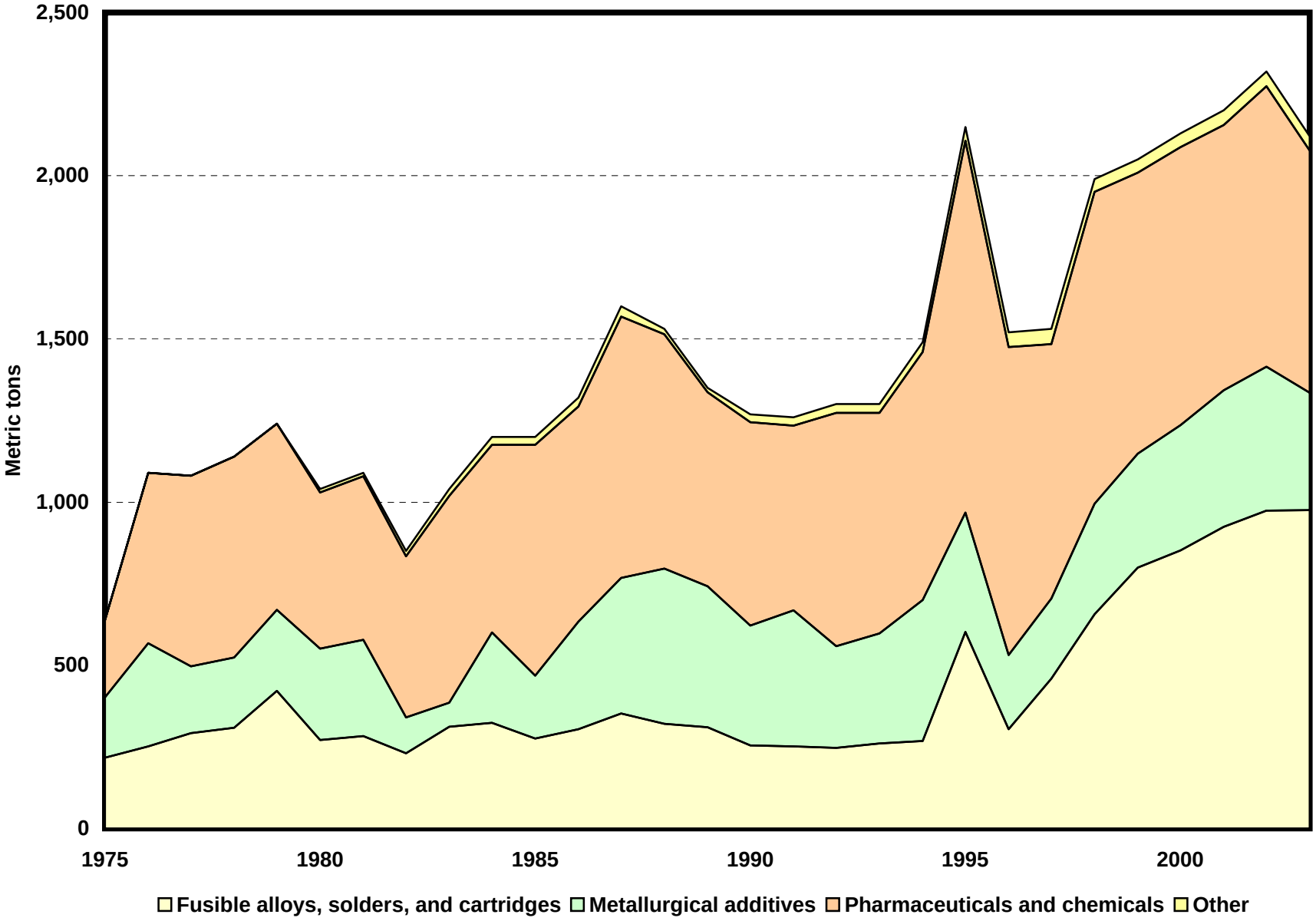
BISMUTH END-USE STATISTICS[1]
U.S. GEOLOGICAL SURVEY
[Metric tons]
Last modification: September 1, 2005

Year	Fusible alloys, solders, and cartridges	Metallurgical additives	Pharmaceuticals and chemicals	Other	Apparent consumption
1975	217	185	236		638
1976	251	316	523		1,090
1977	292	205	583		1,080
1978	308	217	616		1,140
1979	422	248	570		1,240
1980	270	281	478	10	1,040
1981	283	294	501	11	1,090
1982	230	111	494	17	851
1983	312	73	634	21	1,040
1984	324	276	576	24	1,200
1985	276	192	708	24	1,200
1986	304	330	660	26	1,320
1987	352	416	800	32	1,600
1988	321	474	719	15	1,530
1989	311	432	594	14	1,350
1990	254	368	622	25	1,120
1991	252	416	567	25	1,260
1992	247	312	715	26	1,300
1993	260	338	676	26	1,300
1994	268	432	760	30	1,490
1995	602	366	1,140	43	2,150
1996	304	228	942	46	1,520
1997	459	245	780	46	1,530
1998	657	338	955	40	1,990
1999	800	349	861	41	2,050
2000	852	383	852	43	2,130
2001	924	418	814	44	2,200
2002	974	441	858	46	2,320
2003	975	360	742	42	2,120

[1]Compiled by G.R. Matos, J.D. Jorgenson, and J.F. Carlin, Jr.

End Uses of Bismuth



Bismuth End-Use Worksheet Notes

Data Sources
The sources of data for the bismuth end-use worksheet are the Commodity Data Summaries and the Mineral Commodity Summaries, annual mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey.

End Use
End use is defined as the use of the mineral commodity in a particular industrial sector or product. End-use estimates are derived by applying the reported percentages of end-use consumption to the calculated U.S. apparent consumption; actual consumption may be greater. For bismuth, end-use categories are fusible alloys, solders and cartridges; metallurgical additives; pharmaceuticals and chemicals; and other industrial uses.

For the years 1975 through 1988, the fusible alloys, solders and cartridges end use had been categorized as manufacturing of parts for machinery; and metallurgical additives as primary metal industries. Category names were modified because of changes in the Standard Industrial Classification code description. For the years 1989 through 1998, the category was listed as "fusible alloys and solders." In 1999, cartridges were added to the category to reflect a new application.

Blank cells in the worksheet indicate that data were not available. Data are rounded to no more than three significant digits; data may not add to totals shown.

References
U.S. Bureau of Mines, 1975–77, Commodity Data Summaries, 1975–77.
U.S. Bureau of Mines, 1978–95, Mineral Commodity Summaries, 1978–95.
U.S. Geological Survey, 1997–2005, Mineral Commodity Summaries, 1997–2005.
U.S. Geological Survey and U.S. Bureau of Mines, 1996, Mineral Commodity Summaries, 1996.

Recommended Citation Format:
(1) If taken from CD version:
U.S. Geological Survey, [year of last update, e.g., 2005], [Mineral commodity, e.g., Gold] statistics, *in* Kelly, T.D., and Matos, G.R., comps., Historical statistics for mineral and material commodities in the United States: U.S. Geological Survey Data Series 140, one CD-ROM. (Also available online at http://pubs.usgs.gov/ds/2005/140/.)

(2) If taken from online version:
U.S. Geological Survey, [year of last update, e.g., 2005], [Mineral commodity, e.g., Gold] statistics, *in* Kelly, T.D., and Matos, G.R., comps., Historical statistics for mineral and material commodities in the United States: U.S. Geological Survey Data Series 140, available online at http://pubs.usgs.gov/ds/2005/140/. (Accessed [date].)

For more information, please contact:

USGS Bismuth Commodity Specialist