

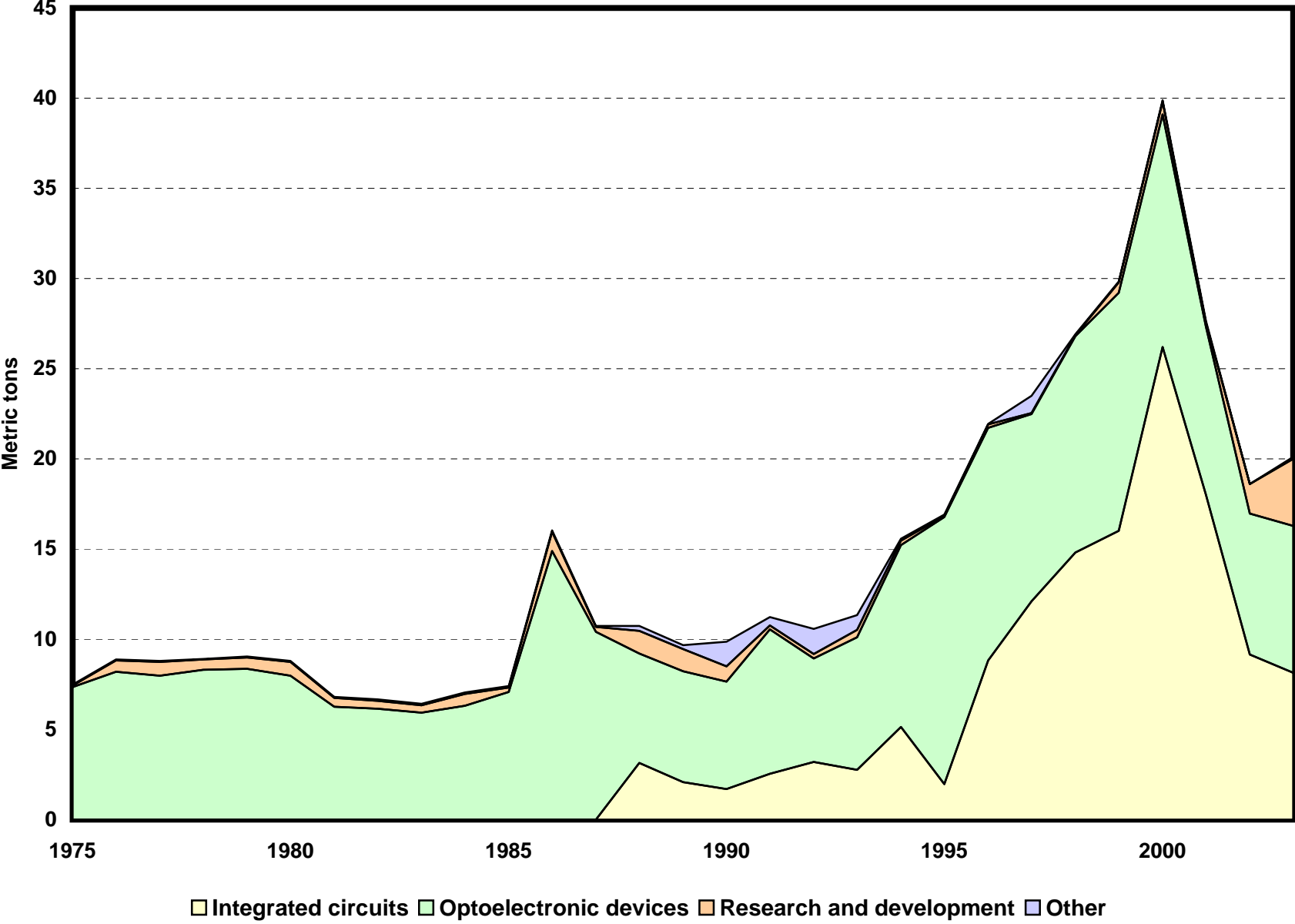
GALLIUM END-USE STATISTICS¹
U.S. GEOLOGICAL SURVEY
 [Metric tons]

Last modification: September 15, 2005

Year	Optoelectronic devices	Integrated circuits	Research and development	Other	Apparent consumption
1975	7.34		0.09	0.06	7.49
1976	8.21		0.61	0.06	8.88
1977	7.97		0.76	0.06	8.79
1978	8.31		0.58	0.02	8.91
1979	8.37		0.62	0.06	9.05
1980	7.99		0.75	0.07	8.81
1981	6.26		0.49	0.06	6.81
1982	6.15		0.44	0.08	6.67
1983	5.92		0.41	0.10	6.43
1984	6.32		0.64	0.10	7.06
1985	7.07		0.26	0.07	7.40
1986	14.90		1.05	0.08	16.00
1987	10.40		0.27	0.06	10.70
1988	6.07	3.15	1.24	0.29	10.70
1989	6.15	2.08	1.21	0.22	9.67
1990	5.95	1.69	0.85	1.37	9.86
1991	8.00	2.54	0.23	0.47	11.20
1992	5.73	3.21	0.23	1.40	10.60
1993	7.36	2.75	0.41	0.83	11.30
1994	10.10	5.13	0.23	0.12	15.60
1995	14.80	1.97	0.06	0.09	16.90
1996	12.90	8.82	0.18	0.04	21.90
1997	10.40	12.10	0.04	0.96	23.60
1998	12.00	14.80	0.05	0.06	26.90
1999	13.20	16.00	0.57	0.06	29.80
2000	12.90	26.20	0.70	0.10	39.90
2001	9.31	18.00	0.24	0.10	27.70
2002	7.82	9.16	1.63	0.01	18.60
2003	8.15	8.14	3.72	0.09	20.10

¹Compiled by G.R. Matos and D.A. Kramer.

End Uses of Gallium



Gallium End-Use Worksheet Notes

Data Sources

The sources of data for the gallium end-use worksheet are the Minerals Yearbook (MYB) and Mineral Commodity Summaries, annual collection, compilation, and analysis of mineral industry data, published by 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. For gallium, end-use categories are optoelectronic devices (laser diodes and light emitting diodes); integrated circuits (analog and digital); research and development; and other uses. End-use estimates include gallium metal and gallium compounds.

From 1975–87, consumption data were not collected separately for optoelectronic devices and integrated circuits. Data reported in the MYB for these years under the category “electronics” are reported here under “optoelectronic devices.” Prior to 1988, most of the electronics reported were optoelectronic devices. Any data for integrated circuits are included in the figure shown for optoelectronic devices; consumption of gallium for integrated circuits is estimated to be small.

Data are rounded to no more than three significant digits; data may not add to totals shown.

References

- U.S. Bureau of Mines, 1993, Mineral Commodity Summaries, 1993.
- U.S. Bureau of Mines, 1977–96, Minerals Yearbook, v. I, 1975–94.
- U.S. Geological Survey, 1997–2005, Minerals Yearbook, v. I, 1995–2003.

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 Gallium Commodity Specialist](#)