

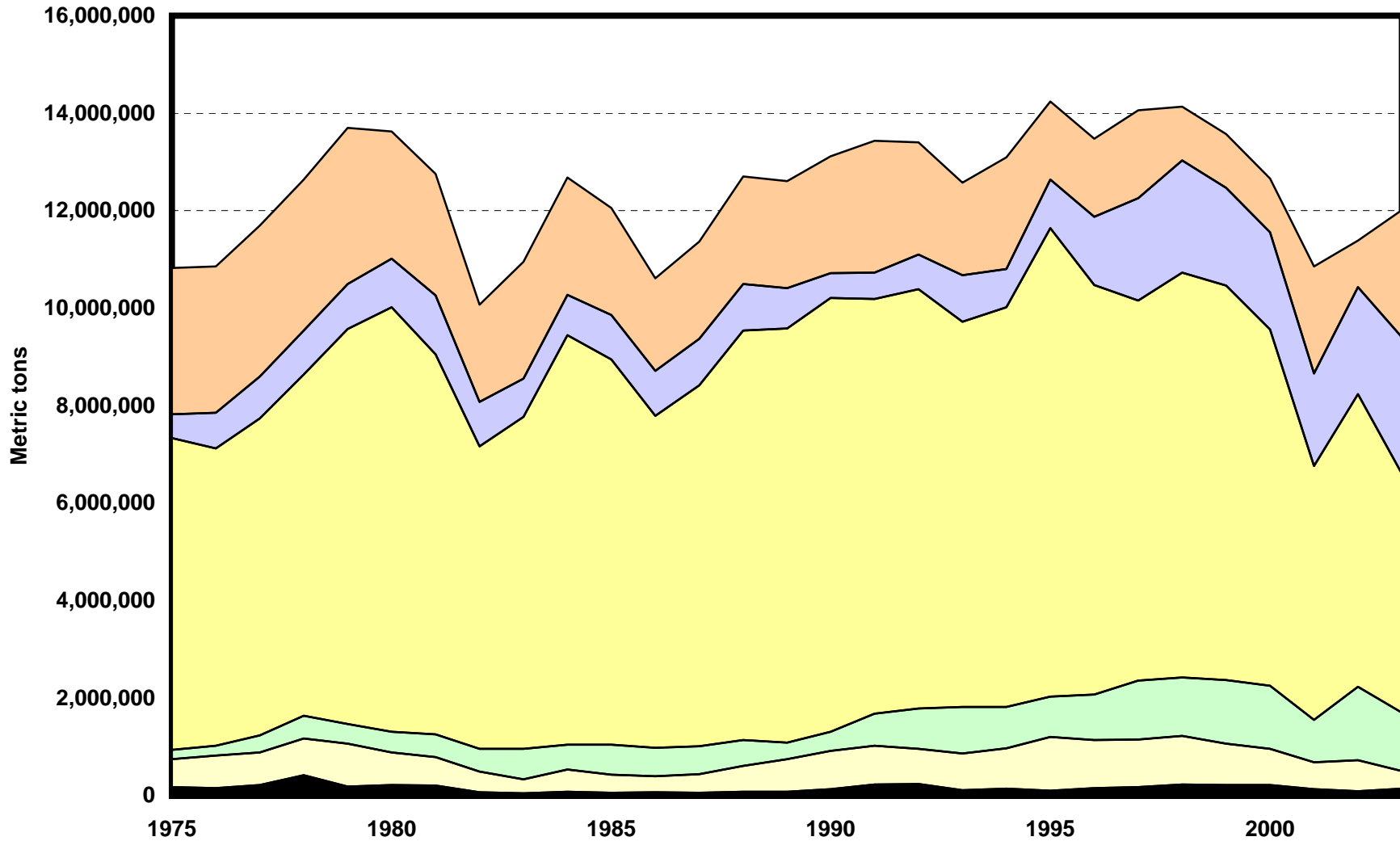
SULFUR END-USE STATISTICS¹
U.S. GEOLOGICAL SURVEY
 [Metric tons]

Last modification: September 15, 2005

| Year | Nitrogenous fertilizers | Ore leaching | Other agricultural chemicals | Petroleum refining and other petroleum and coal products | Phosphatic fertilizers | Other | Apparent consumption |
|-------------|--------------------------------|---------------------|-------------------------------------|---|-------------------------------|--------------|-----------------------------|
| 1975 | 180,000 | 570,000 | 190,000 | 490,000 | 6,400,000 | 3,000,000 | 10,800,000 |
| 1976 | 160,000 | 670,000 | 200,000 | 730,000 | 6,100,000 | 3,000,000 | 10,900,000 |
| 1977 | 220,000 | 670,000 | 350,000 | 860,000 | 6,500,000 | 3,100,000 | 11,700,000 |
| 1978 | 420,000 | 760,000 | 460,000 | 900,000 | 7,000,000 | 3,100,000 | 12,600,000 |
| 1979 | 190,000 | 880,000 | 400,000 | 930,000 | 8,100,000 | 3,200,000 | 13,700,000 |
| 1980 | 220,000 | 670,000 | 430,000 | 1,000,000 | 8,700,000 | 2,600,000 | 13,700,000 |
| 1981 | 210,000 | 590,000 | 460,000 | 1,200,000 | 7,800,000 | 2,500,000 | 12,800,000 |
| 1982 | 77,000 | 420,000 | 470,000 | 910,000 | 6,200,000 | 2,000,000 | 10,100,000 |
| 1983 | 48,000 | 290,000 | 630,000 | 790,000 | 6,800,000 | 2,400,000 | 11,000,000 |
| 1984 | 88,000 | 450,000 | 510,000 | 830,000 | 8,400,000 | 2,400,000 | 12,700,000 |
| 1985 | 60,000 | 370,000 | 620,000 | 910,000 | 7,900,000 | 2,200,000 | 12,000,000 |
| 1986 | 78,000 | 320,000 | 590,000 | 930,000 | 6,800,000 | 1,900,000 | 10,600,000 |
| 1987 | 68,000 | 380,000 | 570,000 | 950,000 | 7,400,000 | 2,000,000 | 11,300,000 |
| 1988 | 80,000 | 540,000 | 520,000 | 960,000 | 8,400,000 | 2,200,000 | 12,700,000 |
| 1989 | 89,000 | 660,000 | 340,000 | 820,000 | 8,500,000 | 2,200,000 | 12,700,000 |
| 1990 | 140,000 | 780,000 | 390,000 | 510,000 | 8,900,000 | 2,400,000 | 13,100,000 |
| 1991 | 230,000 | 800,000 | 660,000 | 540,000 | 8,500,000 | 2,700,000 | 13,500,000 |
| 1992 | 240,000 | 720,000 | 830,000 | 710,000 | 8,600,000 | 2,300,000 | 13,400,000 |
| 1993 | 120,000 | 750,000 | 950,000 | 960,000 | 7,900,000 | 1,900,000 | 12,600,000 |
| 1994 | 150,000 | 830,000 | 840,000 | 780,000 | 8,200,000 | 2,300,000 | 13,100,000 |
| 1995 | 110,000 | 1,100,000 | 830,000 | 1,000,000 | 9,600,000 | 1,600,000 | 14,300,000 |
| 1996 | 160,000 | 980,000 | 940,000 | 1,400,000 | 8,400,000 | 1,600,000 | 13,600,000 |
| 1997 | 180,000 | 980,000 | 1,200,000 | 2,100,000 | 7,800,000 | 1,800,000 | 14,000,000 |
| 1998 | 230,000 | 1,000,000 | 1,200,000 | 2,300,000 | 8,300,000 | 1,100,000 | 14,100,000 |
| 1999 | 220,000 | 850,000 | 1,300,000 | 2,000,000 | 8,100,000 | 1,100,000 | 13,600,000 |
| 2000 | 220,000 | 740,000 | 1,300,000 | 2,000,000 | 7,300,000 | 1,100,000 | 12,700,000 |
| 2001 | 140,000 | 550,000 | 870,000 | 1,900,000 | 5,200,000 | 2,200,000 | 10,900,000 |
| 2002 | 94,000 | 640,000 | 1,500,000 | 2,200,000 | 6,000,000 | 950,000 | 11,400,000 |
| 2003 | 150,000 | 360,000 | 1,200,000 | 2,800,000 | 4,900,000 | 2,600,000 | 12,000,000 |

¹Compiled by G.R. Matos and J.A. Ober.

End Uses of Sulfur



- Nitrogenous fertilizers
- Other agricultural chemicals
- Petroleum refining and other petroleum and coal products
- Ore leaching
- Phosphatic fertilizers
- Other

Sulfur End-Use Worksheet Notes

Data Sources

The sources of data for the sulfur end-use worksheet are the report "*Materials flow of sulfur*" and the Minerals Yearbook, an annual collection, compilation, and analysis of mineral industry data, published by 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. The end-use estimates reported here are derived by applying the end-use category shares of reported sulfur and sulfuric acid consumption to the calculated apparent consumption. For sulfur, end-use categories are nitrogenous fertilizers; ore leaching; other agricultural chemicals; petroleum refining and other petroleum and coal products; phosphatic fertilizers; and other uses.

The ore leaching category includes copper ores, uranium and vanadium ores, and other ores.

The other uses category includes pulp mills and paper products; inorganic pigments paints and allied products, industrial organic chemicals, and other chemical products; other inorganic chemicals; synthetic rubber and other plastic materials and synthetics; cellulosic fibers including rayon; drugs; soaps and detergents; industrial organic chemicals; pesticides; explosives; water-treating compounds; other chemical products; steel pickling; nonferrous metals; other primary metals; storage batteries (acid); exported sulfuric acid; and unidentified.

The categories used in the end-use table correspond to the standard industrial classification.

Fluctuations in the data correspond to the cycles in the fertilizer industry and the economic cycles.

End-use data are rounded to no more than two significant digits; data may not add to totals shown. Apparent consumption data are rounded to no more than three significant digits.

References

Ober, J.A., 2003, Materials flow of sulfur: U.S. Geological Survey Open file report 02-298, available only online at <http://pubs.usgs.gov/of/2002/of02-298/>. (Accessed October 19, 2004.)

U.S. Geological Survey, 2003–05, Minerals Yearbook, v. I, 2001–03.

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].)

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