| Year | Glass |  |  |  |  | Chemicals | Soaps and detergents | Pulp and paper | $\begin{gathered} \text { Water } \\ \text { treatment } \end{gathered}$ | Flue gasdesulfurization | Distributors | Other | Undistributed | $\begin{gathered} \text { Apparent } \\ \text { consumption } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Container | Flat | Fiber | Other glass | Total glass |  |  |  |  |  |  |  |  |  |
| 1975 |  |  |  |  | 3,260,000 | 1,480,000 | 299,000 | 218,000 | 181,000 |  |  | 721,000 |  | 6,160,000 |
| 1976 |  |  |  |  | 3,260,000 | 1,510,000 | 308,000 | 236,000 | 200,000 |  |  | 723,000 |  | 6,230,000 |
| 1977 |  |  |  |  | 3,610,000 | 1,520,000 | 308,000 | 236,000 | 200,000 |  |  | 738,000 |  | 6,610,000 |
| 1978 |  |  |  |  | 3,780,000 | 1,560,000 | 318,000 | 236,000 | 200,000 |  |  | 747,000 |  | 6,840,000 |
| 1979 |  |  |  |  | 3,620,000 | 1,530,000 | 327,000 | 229,000 | 193,000 |  |  | 724,000 |  | 6,630,000 |
| 1980 | 2,520,000 | 559,000 | 175,000 | 244,000 | 3,490,000 | 1,290,000 | 453,000 | 227,000 | 227,000 |  |  | 777,000 |  | 6,470,000 |
| 1981 | 2,380,000 | 503,000 | 236,000 | 234,000 | 3,360,000 | 1,290,000 | 454,000 | 191,000 | 227,000 |  |  | 936,000 |  | 6,450,000 |
| 1982 | 2,270,000 | 454,000 | 200,000 | 254,000 | 3,180,000 | 1,180,000 | 454,000 | 249,000 | 209,000 |  |  | 781,000 |  | 6,050,000 |
| 1983 | 2,180,000 | 522,000 | 209,000 | 222,000 | 3,130,000 | 1,270,000 | 562,000 | 181,000 | 209,000 |  |  | 878,000 |  | 6,230,000 |
| 1984 | 2,090,000 | 544,000 | 227,000 | 227,000 | 3,090,000 | 1,410,000 | 544,000 | 227,000 | 272,000 | 272,000 |  | 422,000 |  | 6,230,000 |
| 1985 | 2,000,000 | 635,000 | 249,000 | 204,000 | 3,080,000 | 1,360,000 | 544,000 | 318,000 | 272,000 | 159,000 |  | 387,000 |  | 6,120,000 |
| 1986 | 1,950,000 | 680,000 | 272,000 | 249,000 | 3,150,000 | 1,180,000 | 590,000 | 181,000 | 227,000 | 181,000 |  | 470,000 |  | 5,980,000 |
| 1987 | 2,110,000 | 821,000 | 249,000 | 166,000 | 3,340,000 | 1,240,000 | 684,000 | 63,000 | 72,000 | 183,000 | 349,000 | 168,000 | 120,000 | 6,220,000 |
| 1988 | 2,130,000 | 852,000 | 246,000 | 164,000 | 3,390,000 | 1,450,000 | 718,000 | 111,000 | 110,000 | 200,000 | 373,000 | 148,000 | 90,000 | 6,590,000 |
| 1989 | 1,960,000 | 907,000 | 241,000 | 185,000 | 3,290,000 | 1,410,000 | 781,000 | 114,000 | 92,000 | 208,000 | 380,000 | 188,000 | 50,000 | 6,520,000 |
| 1990 | 1,910,000 | 851,000 | 228,000 | 189,000 | 3,180,000 | 1,570,000 | 835,000 | 132,000 | 91,000 | 207,000 | 376,000 | 136,000 | 310,000 | 6,840,000 |
| 1991 | 1,820,000 | 767,000 | 206,000 | 201,000 | 3,000,000 | 1,510,000 | 796,000 | 147,000 | 106,000 | 171,000 | 403,000 | 148,000 | 200,000 | 6,480,000 |
| 1992 | 1,810,000 | 837,000 | 214,000 | 219,000 | 3,080,000 | 1,540,000 | 765,000 | 175,000 | 104,000 | 144,000 | 387,000 | 129,000 | 40,000 | 6,360,000 |
| 1993 | 1,790,000 | 869,000 | 220,000 | 216,000 | 3,100,000 | 1,480,000 | 806,000 | 139,000 | 116,000 | 151,000 | 337,000 | 163,000 | 70,000 | 6,350,000 |
| 1994 | 1,780,000 | 926,000 | 220,000 | 220,000 | 3,150,000 | 1,370,000 | 834,000 | 145,000 | 103,000 | 138,000 | 313,000 | 206,000 | -20,000 | 6,240,000 |
| 1995 | 1,690,000 | 979,000 | 214,000 | 248,000 | 3,130,000 | 1,650,000 | 784,000 | 186,000 | 108,000 | 130,000 | 323,000 | 185,000 | 10,000 | 6,510,000 |
| 1996 | 1,550,000 | 1,010,000 | 237,000 | 247,000 | 3,040,000 | 1,690,000 | 785,000 | 183,000 | 87,000 | 152,000 | 314,000 | 145,000 | 90,000 | 6,480,000 |
| 1997 | 1,530,000 | 1,090,000 | 257,000 | 249,000 | 3,130,000 | 1,700,000 | 750,000 | 143,000 | 83,000 | 209,000 | 325,000 | 145,000 | 190,000 | 6,670,000 |
| 1998 | 1,610,000 | 1,100,000 | 260,000 | 244,000 | 3,220,000 | 1,760,000 | 704,000 | 134,000 | 103,000 | 214,000 | 317,000 | 102,000 | 10,000 | 6,560,000 |
| 1999 | 1,620,000 | 1,130,000 | 263,000 | 254,000 | 3,270,000 | 1,670,000 | 729,000 | 121,000 | 104,000 | 130,000 | 329,000 | 75,000 | 310,000 | 6,740,000 |
| 2000 | 1,530,000 | 1,160,000 | 247,000 | 240,000 | 3,170,000 | 1,720,000 | 715,000 | 113,000 | 90,000 | 121,000 | 372,000 | 91,000 | 40,000 | 6,430,000 |
| 2001 | 1,510,000 | 1,100,000 | 246,000 | 222,000 | 3,070,000 | 1,680,000 | 697,000 | 148,000 | 102,000 | 119,000 | 338,000 | 224,000 | -70,000 | 6,310,000 |
| 2002 | 1,560,000 | 1,100,000 | 273,000 | 231,000 | 3,170,000 | 1,670,000 | 733,000 | 104,000 | 88,000 | 123,000 | 315,000 | 225,000 | -180,000 | 6,250,000 |
| 2003 | 1,580,000 | 1,060,000 | 269,000 | 196,000 | 3,100,000 | 1,730,000 | 674,000 | 114,000 | 70,400 | 124,000 | 277,000 | 180,000 | -180,000 | 6,090,000 |

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## End Uses of Soda Ash



## Soda Ash End-Use Worksheet Notes

## Data Source

The source of data for the soda ash end-use worksheet is the Minerals Yearbook, an 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 soda ash, end-use categories are glass (which comprises container, flat, fiber, and other glass uses), chemicals, soaps and detergents, pulp and paper, water treatment, flue gas desulfurization, distributors, and other industrial uses.

The other category include soda ash in petroleum and metal refining, leather tanning, enamels, and other minor uses. It also includes data in categories indicated by footnote 3.

Starting in 1987 end use data were directly reported by the industry. Consumption data by end use often disagree with calculated apparent consumption, which necessitates including an "undistributed" category to make apparent consumption calculations agree with reported consumption totals. These discrepancies are due to the fluctuating balance of inventory in transit from plants to domestic or export destinations, and unsold foreign inventories of U.S. producers.

Blank cells in the spreadsheet 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, 1992-96, Minerals Yearbook, v. I, 1990-94.
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:

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[^0]:    Compiled by G.R. Matos and D.S. Kostick.
    ${ }^{2}$ Specific end-use data not available; included with the "Total glass" category
    ${ }^{3}$ Specific end-use data not available; included with the "Other" category.

