

Mineral Industry Surveys

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FLUORSPAR IN THE FOURTH QUARTER 2002

Reported consumption of fluorspar in the fourth quarter was 151,000 metric tons (t), essentially unchanged from the revised figure for the previous quarter but nearly 52% higher compared with the fourth quarter of 2001. Consumption of fluorspar for hydrofluoric acid (HF) and aluminum fluoride production was 126,000 t, an increase of about 11% compared with the revised figure for the previous quarter, but nearly 61% higher than in the fourth quarter of 2001. Imports of fluorspar were 155,000 t, about 44% higher than in the previous quarter and about 12% higher than in the fourth quarter of 2001.

End of the year totals revealed that reported fluorspar consumption increased by 52,000 t or nearly 10% compared with 2001. This increase was mainly due to higher consumption levels for HF production. Fluorspar imports decreased by more than 5%, imports of HF increased by nearly 3%, imports of cryolite increased nearly 18%, and imports of aluminum fluoride were essentially unchanged.

Industry News

Vergenoeg Mining Co. of South Africa, having completed its program of improvements mainly in its mineral processing facilities, received ISO 9001:2000 quality accreditation for the production and supply of fluorspar. Vergenoeg produces about 15,000 t of metspar and 110,000 t of acidspar annually (Industrial Minerals, 2003).

Defense Stockpile

There were no sales from the Defense National Stockpile during the 2002 calendar year. Although there have been no sales since 2000, the Defense National Stockpile Center has reclassified or clarified the status of much of the remaining metallurgical-grade material. At the end of December, there remained about 7,000 t of acid-grade fluorspar (acidspar) and about 90,000 t of metallurgical-grade fluorspar (metspar) classified as uncommitted inventory. The stockpile also contained about 13,000 t of sub-specification metspar. Inventories of material committed for sale pending shipment included nearly 100,000 t of acidspar and about 23,000 t of metspar.

Fluorochemical News

On January 21, 2002, the U.S. Environmental Protection Agency's (EPA) hydrochlorofluorocarbon (HCFC) Allowance Allocation Final Rule was published in the Federal Register and immediately went into effect. The rule specifies precisely which companies are allowed to produce or import HCFCs, and what amounts can be produced or imported by each company. This dramatically impacts HCFC 22, which is the largest volume HCFC in use. EPA based the allocation on the years 1994 through 1997 and identified for each company the year with the largest imports or production during that period. As a result, some HCFC producers or importers have seen their allocations

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reduced significantly below what they produced or imported last year, and some importers not active during the base years received no allocations at all. ATOFINA Chemicals Inc., E.I. du Pont de Nemours and Co., and Honeywell International Inc. received more than 80% of the allocations. The allocations had two immediate effects—they shut out large amounts of imported HCFCs and resulted in substantial industry-wide price increases (Lerner, 2003).

References Cited

- Industrial Minerals, 2003, Vergenoeg fluorspar—ISO 9001:2000 award:
Industrial Minerals, no. 425, February, p. 10.
- Lerner, Ivan, 2003, EPA ruling may be boon for refrigerant's price: Chemical
Market Reporter, v. 263, no. 5, February 3, p. 9.

TABLE 1
SALIENT FLUORSPAR STATISTICS 1/

(Metric tons, unless otherwise specified)

	2001		2002			
	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter	Year to date
Imports for consumption:	139,000	138,000	93,100	108,000	155,000	494,000
Value per ton, c.i.f. U.S. port, acid grade	\$138	\$133	\$124	\$129	\$122	\$127 2/
Value per ton, c.i.f. U.S. port, metallurgical	\$91	\$94	\$84	\$89	\$101	\$92 2/
Exports	5,310	6,740	6,170	6,020	5,390	24,300
End of quarter stocks, consumer	71,100	118,000 r/	125,000 r/	99,400 r/	122,000	122,000
Fluorspar equivalent of imported hydrofluoric acid	39,500	38,100	51,700	48,500	34,000	172,000
Fluorspar equivalent of imported cryolite	1,350	1,740	1,210	1,730	4,860	9,540
Quarterly reported fluorspar consumption	99,600	158,000 r/	131,000 r/	147,000 r/	151,000	588,000

r/ Revised.

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

2/ Average value.

TABLE 2
CONSUMPTION OF FLUORSPAR BY END USE AND ASSAY RANGE 1/
(DOMESTIC AND FOREIGN IN THE UNITED STATES)

(Metric tons)

End use or product	Third quarter 2002			Fourth quarter 2002			2002 Year to date
	More than 97% calcium fluoride	Not more than 97% calcium fluoride	Total	More than 97% calcium fluoride	Not more than 97% calcium fluoride	Total	
Hydrofluoric acid and aluminum fluoride	114,000 r/	--	114,000 r/	126,000	--	126,000	478,000
Metallurgical	6,400 r/	17,700 r/	24,100 r/	6,620	9,800	16,400	76,900
Other uses or products 2/	8,580	--	8,580	8,490	--	8,490	33,300
Total	129,000 r/	17,700 r/	147,000 r/	142,000	9,800	151,000	588,000
Stocks, end of quarter 3/	68,600 r/	30,900	99,400 r/	91,600	30,900	122,000	122,000

r/ Revised. -- Zero.

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

2/ Includes acid grade used in enamel, glass and fiberglass, steel castings, and welding rod coatings.

3/ Beginning with the first quarter 2002, stocks data include distributor stocks (excluding National Defense Stockpile holdings) and consumer stocks for hydrofluoric acid and aluminum fluoride.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FLUORSPAR, BY COUNTRY AND VALUE 1/ 2/

	2001		2002									
	Fourth quarter		First quarter		Second quarter		Third quarter		Fourth quarter		Year to date	
	Quantity (metric tons)	Value 3/ (thousands)										
Containing more than 97% calcium fluoride:												
China 4/	81,800	\$11,800	89,900	\$12,200	60,400	\$7,930	66,000	\$8,630	128,000	\$15,600	344,000	\$44,400
France	105	37	40	13	--	--	60	25	39	13	139	51
Germany	--	--	--	--	1	3	--	--	--	--	1	3
Japan	--	--	--	--	--	--	--	--	2,910	344	2,910	344
Mexico	5,410	718	8,260	1,050	6,490	864 r/	8,950	1,100	11,200	1,330	34,900	4,340
South Africa	48,300	6,100	31,700	4,000	15,000	1,730	24,500	3,090	11,900	1,470	83,100	10,300
United Kingdom	173	24	--	--	2	2	--	--	276	34	278	36
Total	136,000	18,700	130,000	17,300	81,900	10,500 r/	99,500	12,800	154,000	18,800	466,000	59,500
Containing not more than 97% calcium fluoride:												
Austria	--	--	--	--	--	--	128	11	--	--	128	11
Canada	20	7	36	12	34	11	40	14	37	12	147	49
Japan	500	67	--	--	--	--	--	--	--	--	--	--
Mexico	2,930	240	2,930	244	11,200	927	8,470	745	596	52	23,200	1,970
South Africa	--	--	5,000	492	--	--	--	--	--	--	5,000	492
United Kingdom	--	--	74	9	--	--	--	--	--	--	74	9
Total	3,450	314	8,040	757	11,200	938	8,630	770	633	64	28,500	2,530
Grand total	139,000	19,000	138,000	18,000	93,100	11,500 r/	108,000	13,600	155,000	18,900	494,000	62,000

r/ Revised. -- Zero.

1/ Imports for consumption include imports of immediate entry, and warehouse withdrawals.

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

3/ C.i.f. at U.S. ports.

4/ Data do not agree with published U.S. Census Bureau data due to adjustments made by the U.S. Geological Survey.

Source: U.S. Census Bureau.

TABLE 4
IMPORTS FOR CONSUMPTION OF HYDROFLUORIC ACID 1/

	2001		2002									
	Fourth quarter		First quarter		Second quarter		Third quarter		Fourth quarter		Year to date	
	Quantity (metric tons)	Value 2/ (thousands)										
Canada	5,330	\$6,460	6,070	\$7,470	7,590	\$9,130	8,800	\$10,700	5,830	\$6,940	28,300	\$34,200
Japan	272	705	351	859	336	837	394	1,030	283	724	1,360	3,450
Mexico	20,600	19,400	18,800	17,800	26,300	24,800	22,900	21,900	16,200	15,200	84,200	79,800
Other 3/	157	258	168	236	278	382	244	321	392	559	1,080	1,500
Total	26,300	26,800	25,400	26,400	34,500	35,200	32,400	34,000	22,700	23,500	115,000	119,000

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

2/ C.i.f. at U.S. ports.

3/ Includes China, France, Germany, India, Italy, Netherlands, the Republic of Korea, and the United Kingdom.

Source: U.S. Census Bureau.