

Mineral Industry Surveys

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FLUORSPAR IN THE FOURTH QUARTER 2001

Reported consumption of fluorspar in the fourth quarter was 110,000 metric tons (t), nearly 21% lower than in the previous quarter and nearly 11% lower than in the fourth quarter of 2000. Consumption of fluorspar for hydrofluoric acid (HF) and aluminum fluoride production was 89,000 t, a decrease of 21% from the previous quarter, and a decrease of 22% from the fourth quarter of 2000. Imports of fluorspar were 139,000 t, 59% higher than in the previous quarter and about 28% higher than in the fourth quarter of 2000.

Industry News

In December 2001, the Chinese Ministry of Foreign Trade and Economic Cooperation held bidding for about 500,000 t of an expected 1 million metric tons of fluorspar authorized for export in 2002. Bids by potential Chinese exporters were for 325,000 t under invitational tenders at an average value of \$39 to \$41 per ton and for 175,000 t under public tenders that ranged from \$74 to \$83 per ton.

South Africa's fluorspar production for 2001 was 270,000 t, with export sales of about 218,000 t, according to monthly statistics from the South African Department of Minerals and Energy.

The International Fluorspar Conference 2002 was held in Tucson, AZ, on March 18-20. The program included an excellent variety of presentations including talks on fluorspar in cement manufacturing, fluorogypsum use by the cement industry, fluorocarbons, fluoropolymers, world-wide fluorspar demand, a review of metspar markets, a discussion of the freight markets, a China update, and reviews of the mining operations of producers in France, Morocco, and Russia.

Fluorochemical News

ATOFINA is beginning production of hydrofluorocarbon 32

(HFC-32) at a facility in Zaramillo, Spain. HFC-32 is a major component in the R-22 substitutes (R-410A, R-407C) and is the fastest-growing HFC, with its growth tied directly to the development of these new blends. Beyond the initial project, ATOFINA plans to double capacity at Zaramillo to keep pace with market growth, and engineering work is underway for a major HFC-32 investment at Calvert City, KY, to support the future development of the U.S. market. Because of the transition away from the use of hydrochlorofluorocarbon 22 (HCFC-22) in the refrigeration and air conditioning markets, ATOFINA has decided to reduce its HCFC-22 capacity. To this end the company has decided to cease production at its Wichita, KS, plant at the end of 2002 (ATOFINA Chemicals, Inc., February 26, 2002, ATOFINA and Forane—Positioned for leadership and growth, accessed March 9, 2002, via URL <http://www.atofinchemicals.com/homepage.cfm>).

Solvay S.A. announced that it had agreed to acquire Italian fluorinated specialties producer Ausimont S.p.A. from the Montedison Group and Longside International. The acquisition, which is expected to be finalized during the first half of 2002, will cost \$1.16 billion and include 100% of Ausimont's capital and 100% of Agora, Ausimont's holding company. Ausimont is a major producer of fluoroproducts such as fluoroelastomers and fluoropolymers (Industrial Minerals, 2002).

Reference Cited

Industrial Minerals, 2002, Solvay buy [sic] fluoro specialist Ausimont: Industrial Minerals, no. 413, February, p. 12.

TABLE 1
SALIENT FLUORSPAR STATISTICS 1/

(Metric tons, unless otherwise specified)

	2000	2001				
	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter	Year to date
Imports for consumption:	109,000	152,000	143,000	87,600	139,000	522,000
Value per ton, c.i.f. U.S. port, acid grade	\$130	\$136	\$127	\$142	\$138	\$136 2/
Value per ton, c.i.f. U.S. port, metallurgical	\$89	\$76	\$79	\$82	\$91	\$82 2/
Exports	5,790	4,570	6,020	5,290	5,310	21,200
End of quarter stocks, consumer 3/	73,900	95,800	100,000	66,400	59,700	XX
Fluorspar equivalent of imported hydrofluoric acid	43,700	40,600	46,200	41,000	39,500	167,000
Fluorspar equivalent of imported cryolite	2,700	3,500	2,240	1,000	1,350	8,100
Quarterly reported fluorspar consumption 4/	123,000	145,000	152,000	139,000	110,000	547,000

XX Not applicable.

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

2/ Average value.

3/ Because of a change in survey methodology, beginning with the first quarter 2001 stocks data are only available for hydrofluoric acid and aluminum fluoride.

4/ Beginning with the first quarter 2001, data from distributors have replaced all consumption data except for hydrofluoric acid and aluminum fluoride.

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 2001			Fourth quarter 2001			2001 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	113,000	--	113,000	87,900	1,100	89,000	441,000
Metallurgical	5,530	7,940	13,500	3,660	3,670	7,340	65,000
Other uses or products 2/	5,040	7,700	12,700	7,360	6,620	14,000	40,700
Total	124,000	15,600	139,000	98,900	11,400	110,000	547,000
Stocks, end of quarter 3/	66,400	NA	66,400	59,700	NA	59,700	XX

NA Not available. XX Not applicable. -- 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/ Because of a change in survey methodology, beginning with the first quarter 2001 stocks data are only available for hydrofluoric acid and aluminum fluoride.

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

	2000		2001									
	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/	45,000	\$6,340	108,000	\$15,000	93,800	\$11,700	69,600	\$9,990	81,800	\$11,800	353,000	\$48,500
France	20	13	59	20	60	20	98	33	105	37	322	110
Germany	--	--	17	8	17	8	18	11	--	--	52	27
Mexico	4,050	558	9,450	1,160	9,180	1,260	3,880	548	5,410	718	27,900	3,690
South Africa 4/	48,600	5,760	26,800	3,380	28,700	3,650	9,900	1,300	48,300	6,100	114,000	14,400
United Kingdom	182	23	--	--	--	--	--	--	173	24	173	24
Total	97,900	12,700	144,000	19,600	132,000	16,700	83,500	11,900	136,000	18,700	495,000	66,800
Containing not more than 97% calcium fluoride:												
Canada	21	6	22	8	39	12	13	4	20	7	94	31
Japan	--	--	--	--	--	--	--	--	500	67	500	67
Mexico	11,100	988	7,680	573	11,600	891	4,080	331	2,930	240	26,300	2,040
United Kingdom	1	3	2	4	7	14	--	--	--	--	9	18
Total	11,100	997	7,700	585	11,600	917	4,090	335	3,450	314	26,900	2,150
Grand total	109,000	13,700	152,000	20,200	143,000	17,600	87,600	12,200	139,000	19,000	522,000	69,000

-- 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 owing to adjustments made by the U.S. Geological Survey.

Source: U.S. Census Bureau.

TABLE 4
IMPORTS FOR CONSUMPTION OF HYDROFLUORIC ACID 1/

	2000		2001									
	Fourth quarter		First quarter		Second quarter		Third quarter		Fourth quarter		Year to date	
	Quantity (metric tons)	Value 2/ (thousands)										
Canada	7,500	\$8,900	7,220	\$8,380	6,210	\$7,500	7,580	\$8,670	5,330	\$6,460	26,300	\$31,000
Japan	439	1,200	283	771	315	775	263	680	272	705	1,130	2,930
Mexico	21,000	19,300	19,000	17,800	24,100	22,300	19,300	18,800	20,600	19,400	83,000	78,300
Other 3/	183	222	514	649	161	189	174	250	157	258	1,010	1,350
Total	29,200	29,600	27,000	27,600	30,800	30,800	27,300	28,400	26,300	26,800	112,000	114,000

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, Germany, India, the Republic of Korea, and the United Kingdom.

Source: U.S. Census Bureau.