

ABRASIVES (MANUFACTURED)

(Fused aluminum oxide, silicon carbide, and metallic abrasives)

(Data in metric tons unless otherwise noted)

Domestic Production and Use: Fused aluminum oxide was produced by two companies at three plants in the United States and Canada. Production of crude fused aluminum oxide had an estimated value of \$1.92 million. Silicon carbide was produced by two companies at two plants in the United States. Domestic production of crude silicon carbide had an estimated value of about \$26.4 million. Domestic production of metallic abrasives had an estimated value of about \$124 million. Bonded and coated abrasive products accounted for most abrasive uses of fused aluminum oxide and silicon carbide.

Salient Statistics—United States:	2012	2013	2014	2015	2016^e
Production:					
Fused aluminum oxide, crude ^{1, 2}	10,000	10,000	10,000	10,000	10,000
Silicon carbide ²	35,000	35,000	35,000	35,000	35,000
Metallic abrasives	193,000	191,000	194,000	196,000	191,000
Imports for consumption:					
Fused aluminum oxide	244,000	209,000	198,000	164,000	157,000
Silicon carbide	100,000	119,000	130,000	139,000	116,000
Metallic abrasives	22,000	23,900	23,500	52,800	66,900
Exports:					
Fused aluminum oxide	19,200	24,500	19,500	15,000	14,700
Silicon carbide	20,000	18,400	22,300	19,700	7,580
Metallic abrasives	39,000	35,900	41,000	35,900	29,300
Consumption, apparent:					
Fused aluminum oxide ³	225,000	185,000	179,000	149,000	142,000
Silicon carbide ⁴	115,000	136,000	143,000	154,000	143,000
Metallic abrasives ⁴	176,000	179,000	177,000	213,000	229,000
Price, value of imports, dollars per ton:					
Fused aluminum oxide, regular	563	663	659	579	445
Fused aluminum oxide, high-purity	1,080	971	1,420	1,290	1,440
Silicon carbide, crude	877	638	660	552	470
Metallic abrasives	988	1,030	1,020	584	468
Net import reliance ⁵ as a percentage of apparent consumption:					
Fused aluminum oxide	>75	>75	>75	>75	>75
Silicon carbide	>50	>50	>50	>75	>50
Metallic abrasives	E	E	E	8	16

Recycling: Up to 30% of fused aluminum oxide may be recycled, and about 5% of silicon carbide is recycled.

Import Sources (2012–15): Fused aluminum oxide, crude: China, 84%; Canada, 7%; Venezuela, 5%; other, 4%. Fused aluminum oxide, grain: Jamaica, 15%; Austria, 15%; Germany, 14%; Brazil, 14%; other, 42%. Silicon carbide, crude: China, 71%; South Africa, 14%; Netherlands, 9%; Romania, 4%; other, 2%. Silicon carbide, grain: China, 47%; Brazil, 21%; Russia, 15%; Germany, 5%; other, 12%. Metallic abrasives: Canada, 35%; Sweden, 21%; China, 10%; Germany, 9%; other, 25%.

Tariff:	Item	Number	Normal Trade Relations
			12–31–16
	Artificial corundum, crude	2818.10.1000	Free.
	White, pink, ruby artificial corundum, greater than 97.5% aluminum oxide, grain	2818.10.2010	1.3% ad val.
	Artificial corundum, not elsewhere specified or included, fused aluminum oxide, grain	2818.10.2090	1.3% ad val.
	Silicon carbide, crude	2849.20.1000	Free.
	Silicon carbide, grain	2849.20.2000	0.5% ad val.
	Iron, pig iron, or steel granules	7205.10.0000	Free.

Depletion Allowance: None.