MICA (NATURAL)

(Data in metric tons unless otherwise noted)

Domestic Production and Use: Scrap and flake mica production, excluding low-quality sericite, was estimated to be 43,000 tons valued at $4.8 million. Mica was mined in Georgia, North Carolina, and South Dakota. Scrap mica was recovered principally from mica and sericite schist and as a byproduct from the production of feldspar and kaolin and the beneficiation of industrial sand. Eight companies produced an estimated 64,000 tons of ground mica valued at about $20 million from domestic and imported scrap and flake mica. Most of the domestic production was processed into small-particle-size mica by either wet or dry grinding. Primary uses were joint compound, oil-well-drilling additives, paint, roofing, and rubber products.

A minor amount of sheet mica has been produced as incidental production from feldspar mining in North Carolina in the past several years. Data on sheet mica production were not available in 2021. The domestic consuming industry was dependent on imports to meet demand for sheet mica. Most sheet mica was fabricated into parts for electrical and electronic equipment.

Salient Statistics—United States:	**2017**	**2018**	**2019**	**2020**	**2021[e]**
Scrap and flake:					
Production:[e, 1]					
Sold and used	40,000	42,000	40,100	34,600	43,000
Ground	69,700	68,400	61,300	59,800	64,000
Imports[2]	29,700	28,100	27,300	19,400	22,000
Exports[3]	6,790	6,030	5,500	4,000	5,000
Consumption, apparent[e, 4]	62,900	64,100	61,900	50,000	60,000
Price, average, dollars per metric ton:[e]					
Scrap and flake	165	125	118	111	110
Ground:					
Dry	292	308	316	300	300
Wet	424	422	394	338	350
Net import reliance[5] as a percentage of apparent consumption	36	34	35	31	28
Sheet:					
Sold and used	W	W	W	W	NA
Imports[6]	1,850	1,890	3,150	2,850	3,800
Exports[7]	704	686	779	527	670
Consumption, apparent[e, 4]	1,150	1,200	2,370	2,320	3,100
Price, average value, muscovite and phlogopite mica, dollars per kilogram:[e]					
Block	W	W	W	W	W
Splittings	1.66	1.65	1.66	1.57	1.60
Net import reliance[5] as a percentage of apparent consumption	100	100	100	100	100

Recycling: None.

Import Sources (2017–20): Scrap and flake: Canada, 43%; China, 34%; India, 8%; and other, 15%. Sheet: China, 63%; Brazil, 14%; Belgium, 5%; India, 4%; and other, 14%.

Tariff: Item	**Number**	**Normal Trade Relations 12–31–21**
Split block mica	2525.10.0010	Free.
Mica splittings	2525.10.0020	Free.
Unworked, other	2525.10.0050	Free.
Mica powder	2525.20.0000	Free.
Mica waste	2525.30.0000	Free.
Plates, sheets, and strips of agglomerated or reconstituted mica	6814.10.0000	2.7% ad valorem.
Worked mica and articles of mica, other	6814.90.0000	2.6% ad valorem.

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MICA (NATURAL)

Depletion Allowance: 22% (domestic), 14% (foreign).

Government Stockpile: None.

Events, Trends, and Issues: Domestic production of scrap and flake mica was estimated to have increased by 24% in 2021, compared with that in 2020, and apparent consumption of scrap and flake mica increased by 20%. Apparent consumption of sheet mica was estimated to have increased by 34% in 2021. Increased production and consumption of scrap and flake mica reflected the recovery from the effects of the COVID-19 pandemic of some of industries that use mica, primarily for use in oil-well-drilling fluid and joint compound. No environmental concerns are associated with the manufacture and use of mica products. Supplies of sheet mica for United States consumption were expected to continue to be from imports, primarily from Belgium, Brazil, China, and India.

World Mine Production and Reserves: World production of sheet mica has remained steady; however, reliable production data for some countries that were thought to be major contributors to the world total were unavailable.

	Scrap and flake			Sheet		
	Mine production		Reserves[8]	Mine production[e]		Reserves[8]
	2020	2021[e]		2020	2021	
United States	34,600	43,000	Large	W	NA	Very small
Canada	15,000	15,000	Large	NA	NA	NA
China	95,000	95,000	Large	NA	NA	NA
Finland	64,900	65,000	Large	NA	NA	NA
France	19,000	19,000	Large	NA	NA	NA
India	15,000	15,000	Large	1,000	1,000	110,000
Korea, Republic of	21,000	22,000	11,000,000	—	—	NA
Madagascar	33,000	35,000	Large	—	—	NA
Turkey	4,140	4,000	620,000	—	—	NA
Other countries	51,000	50,000	Large	200	200	Moderate
World total (rounded)	353,000	360,000	Large	NA	NA	NA

World Resources:[8] Resources of scrap and flake mica are available in clay deposits, granite, pegmatite, and schist, and are considered more than adequate to meet anticipated world demand in the foreseeable future. World resources of sheet mica have not been formally evaluated because of the sporadic occurrence of this material. Large deposits of mica-bearing rock are known to exist in countries such as Brazil, India, and Madagascar. Limited resources of sheet mica are available in the United States. Domestic resources were subeconomic because of the high cost of the hand labor required to mine and process sheet mica from pegmatites.

Substitutes: Some lightweight aggregates, such as diatomite, perlite, and vermiculite, may be substituted for ground mica when used as filler. Ground synthetic fluorophlogopite, a fluorine-rich mica, may replace natural ground mica for uses that require the thermal and electrical properties of mica. Many materials can be substituted for mica in numerous electrical, electronic, and insulation uses. Substitutes include acrylic, cellulose acetate, fiberglass, fishpaper, nylatron, nylon, phenolics, polycarbonate, polyester, styrene, polyvinyl chloride, and vulcanized fiber. Mica paper made from scrap mica can be substituted for sheet mica in electrical and insulation applications.

[e]Estimated. NA Not available. W Withheld to avoid disclosing company proprietary data. — Zero.

[1]Excludes low-quality sericite used primarily for brick manufacturing.

[2]Includes data for the following Harmonized Tariff Schedule of the United States codes: 2525.10.0050, <$6.00 per kilogram; 2525.20.0000; and 2525.30.0000.

[3]Includes data for the following Schedule B codes: 2525.10.0000, <$6.00 per kilogram; 2525.20.0000; and 2525.30.0000.

[4]Defined as sold or used by producing companies + imports – exports.

[5]Defined as imports – exports.

[6]Includes data for the following Harmonized Tariff Schedule of the United States codes: 2525.10.0010; 2525.10.0020; 2525.10.0050, >$6.00 per kilogram; 6814.10.0000; and 6814.90.0000.

[7]Includes data for the following Schedule B codes: 2525.10.0000, >$6.00 per kilogram; 6814.10.0000; and 6814.90.0000.

[8]See Appendix C for resource and reserve definitions and information concerning data sources.