

MICA (NATURAL)

(Data in metric tons unless otherwise specified)

Domestic Production and Use: Scrap and flake mica production, excluding low-quality sericite, was estimated to be 38,000 tons valued at \$3.9 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 65,000 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 2023. 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:	2019	2020	2021	2022	2023^e
Scrap and flake:					
Production: ^{e, 1}					
Sold or used	40,100	34,600	40,600	42,000	38,000
Ground	61,300	59,900	66,800	66,300	65,000
Imports ²	27,300	20,400	24,100	22,600	19,000
Exports ³	5,500	3,980	4,850	4,450	4,000
Consumption, apparent ^{e, 4}	61,900	50,000	59,600	60,200	53,000
Price, average, dollars per metric ton: ^e					
Scrap and flake	105	120	100	100	100
Ground:					
Dry	316	303	299	300	300
Wet	394	337	336	350	350
Net import reliance ⁵ as a percentage of apparent consumption	35	31	32	30	28
Sheet:					
Sold or used	W	W	NA	NA	NA
Imports ⁶	3,150	2,840	3,980	5,410	4,100
Exports ⁷	779	528	633	803	1,100
Consumption, apparent ^{e, 4}	2,370	2,310	3,350	4,610	3,000
Price, average value, muscovite and phlogopite mica, dollars per kilogram: ^e					
Block	W	W	W	W	W
Splittings	1.66	1.57	1.88	1.60	1.60
Net import reliance ⁵ as a percentage of apparent consumption	100	100	100	100	100

Recycling: None.

Import Sources (2019–22): Scrap and flake: China, 39%; Canada, 36%; India, 10%; Finland, 4%; and other, 11%. Sheet: China, 77%; Brazil, 7%; India, 4%; Belgium, 3%; and other, 9%.

Tariff:	Item	Number	Normal Trade Relations 12–31–23
	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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Depletion Allowance: 22% (domestic), 14% (foreign).

Government Stockpile: None.

Events, Trends, and Issues: Domestic production of scrap and flake mica was estimated to have decreased by 10% in 2023 compared with that in 2022. Apparent consumption of scrap and flake mica decreased by 12% owing in part to lower use in oil and gas drilling and lower imports. The number of active oil- and gas-drilling rigs dropped by 20% from yearend 2022 to October 31, 2023. Apparent consumption of sheet mica was estimated to have been 35% lower than that in 2022, as imports were 24% lower than those in 2022. 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 China and some from Brazil.

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

	Scrap and flake			Sheet		Reserves ⁸
	Mine production ^e		Reserves ⁸	Mine production ^e		
	2022	2023		2022	2023	
United States	42,000	38,000	Large	NA	NA	Very small
Canada	15,000	15,000	Large	NA	NA	NA
China	80,000	85,000	1,100,000	NA	NA	75,000
Finland	⁹ 58,200	60,000	Large	NA	NA	NA
France	15,000	10,000	Large	NA	NA	NA
India	14,000	14,000	Large	1,000	1,000	110,000
Korea, Republic of	⁹ 10,200	12,000	11,000,000	—	—	NA
Madagascar	35,000	50,000	Large	—	—	NA
Turkey	⁹ 6,070	4,000	620,000	—	—	NA
Other countries	42,500	39,000	Large	200	200	Moderate
World total (rounded)	318,000	330,000	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, polyvinyl chloride, styrene, and vulcanized fiber. Mica paper made from scrap mica can be substituted for sheet mica in electrical and insulation applications.

^eEstimated. NA Not available. W Withheld to avoid disclosing company proprietary data. — Zero.

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

²Includes 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.

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

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

⁵Defined as imports – exports.

⁶Includes 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.

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

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

⁹Reported.