

**MICA (NATURAL), SCRAP AND FLAKE<sup>1</sup>**

(Data in thousand metric tons unless otherwise noted)

**Domestic Production and Use:** Scrap and flake mica production, excluding low-quality sericite, was estimated to be 76,000 tons in 2004. North Carolina accounted for about 54% of U.S. production. The remaining output came from Georgia, New Mexico, South Carolina, and South Dakota. Scrap mica was recovered principally from mica and sericite schist and as a byproduct from feldspar, kaolin, and industrial sand beneficiation. The majority of 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. The value of 2004 scrap mica production was estimated to be \$19 million. Ground mica sales in 2003 were valued at about \$30 million. There were nine domestic producers of scrap and flake mica.

<b><u>Salient Statistics—United States:</u></b>	<b><u>2000</u></b>	<b><u>2001</u></b>	<b><u>2002</u></b>	<b><u>2003</u></b>	<b><u>2004<sup>e</sup></u></b>
Production: <sup>2,3</sup>					
Mine	101	98	81	79	76
Ground	112	89	98	94	90
Imports, mica powder and mica waste	29	32	38	35	50
Exports, mica powder and mica waste	10	9	10	10	10
Consumption, apparent <sup>4</sup>	119	121	106	103	117
Price, average, dollars per ton, reported:					
Scrap and flake	136	82	90	213	245
Ground:					
Wet	751	771	960	938	1,080
Dry	169	147	180	205	236
Stocks, producer, yearend	NA	NA	NA	NA	NA
Employment, mine, number <sup>5</sup>	NA	NA	NA	NA	NA
Net import reliance <sup>6</sup> as a percentage of apparent consumption	15	19	24	24	35

**Recycling:** None.

**Import Sources (2000-03):** Canada, 55%; India, 23%; China, 12%; Finland, 4%; and other, 6%.

<b><u>Tariff: Item</u></b>	<b><u>Number</u></b>	<b><u>Normal Trade Relations</u></b>
		<b><u>12-31-04</u></b>
Mica powder	2525.20.0000	Free.
Mica waste	2525.30.0000	Free.

**Depletion Allowance:** 22% (Domestic), 14% (Foreign).

**Government Stockpile:** None.

## MICA (NATURAL), SCRAP AND FLAKE

**Events, Trends, and Issues:** Domestic production of ground mica decreased in 2004. The decrease primarily resulted from lower production in Georgia and New Mexico. Production in North Carolina in 2004 was estimated to be slightly higher than that of 2003. Canada remained the main source of imported phlogopite mica for the United States. The United States remained a major world producer of scrap and flake mica. Imported mica scrap and flake is primarily used for making mica paper and as a filler and reinforcer in plastics.

### World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves <sup>7</sup>	Reserve base <sup>7</sup>
	2003	2004 <sup>e</sup>		
United States <sup>2</sup>	79	76	Large	Large
Brazil	5	5	Large	Large
Canada	18	18	Large	Large
France	10	10	Large	Large
India	2	2	Large	Large
Korea, Republic of	40	50	Large	Large
Russia	100	100	Large	Large
Other countries	31	35	Large	Large
World total (rounded)	290	300	Large	Large

**World Resources:** Resources of scrap and flake mica are available in granite, pegmatite, schist, and clay deposits and are considered more than adequate to meet anticipated world demand in the foreseeable future.

**Substitutes:** Some of the lightweight aggregates, such as diatomite, vermiculite, and perlite, may be substituted for ground mica when used as a filler. Ground synthetic fluorophlogopite, a fluorine-rich mica, may replace natural ground mica for uses that require the thermal and electrical properties of mica.

<sup>e</sup>Estimated. NA Not available.

<sup>1</sup>See also Mica (Natural), Sheet.

<sup>2</sup>Sold or used by producing companies.

<sup>3</sup>Excludes low-quality sericite used primarily for brick manufacturing.

<sup>4</sup>Based on ground mica.

<sup>5</sup>Total employment at mines and mills where mica was produced and processed, excluding feldspar companies with byproduct production. Employees were not assigned to specific commodities in calculating employment.

<sup>6</sup>Defined as imports – exports + adjustments for Government and industry stock changes.

<sup>7</sup>See [Appendix C](#) for definitions.