

## 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 91,000 metric tons in 1997. North Carolina accounted for about 62% 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 from feldspar, kaolin, and lithium beneficiation. The majority of domestic production was processed into small particle-size mica by either wet or dry grinding. Primary uses were joint compound, paint, roofing, oil well drilling additives, and rubber products. The value of 1997 scrap mica production was estimated at \$8.9 million. Ground mica in 1996 sales were valued at \$34 million. There were 10 domestic producers of scrap and flake mica.

<b>Salient Statistics—United States:</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997<sup>e</sup></b>
Production: <sup>2,3</sup> Mine	88	109	108	97	91
Ground	92	95	98	103	97
Imports, mica powder and mica waste	14	18	22	18	21
Exports, mica powder and mica waste	5	6	7	8	7
Consumption, apparent <sup>4</sup>	105	97	112	107	100
Price, average, dollars per ton, reported:					
Scrap and flake	51	66	70	54	7
Ground:					
Wet	838	1,007	974	1,032	1,000
Dry	152	151	174	182	180
Stocks, producer, yearend <sup>e</sup>	7	14	13	7	11
Employment, mine, number <sup>e,5</sup>	80	364	360	NA	NA
Net import reliance <sup>6</sup> as a percent of apparent consumption	12	1	5	4	3

**Recycling:** None.

**Import Sources (1993-96):** Canada, 68%; India, 25%; Finland, 3%; Japan, 1%; and other, 3%.

<b>Tariff: Item</b>	<b>Number</b>	<b>Most favored nation (MFN) 12/31/97</b>	<b>Non-MFN<sup>7</sup> 12/31/97</b>
Mica powder	2525.20.0000	1.0% ad val.	20% ad val.
Mica waste	2525.30.0000	Free	8.8¢/ kg.

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

**Government Stockpile:** None.

## MICA (NATURAL), SCRAP AND FLAKE

**Events, Trends, and Issues:** Production of ground mica in the United States decreased after 5 consecutive years of increases. The slight decline of mica used in the United States is partially the result of a decrease in housing starts in 1997. Part of the decrease is attributed to a decline in construction repairs as damage from catastrophic events, such as hurricanes and floods, declined in 1997. The United States remained the world's major producer of scrap and flake mica. Imported mica scrap and flake is used primarily for making mica paper and as a filler and reinforcer in plastics.

A new company began production of mica in Newell, SD. The mica was produced as a byproduct of feldspar mining. Mica production at the pegmatite operation was small.

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

	Mine production		Reserves <sup>8</sup>	Reserve base <sup>8</sup>
	1996	1997 <sup>e</sup>		
United States <sup>2</sup>	97	91	Large	Large
Brazil	4	4	Large	Large
Canada	18	18	Large	Large
India	1	1	Large	Large
Korea, Republic of	36	36	Large	Large
Russia	20	20	Large	Large
Other countries	49	50	Large	Large
World total	225	220	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.

<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, including 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 B.

<sup>8</sup>See Appendix D for definitions.