MICA (NATURAL), SCRAP AND FLAKE¹

(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 84,000 metric tons in 2002. North Carolina accounted for about 47% of U.S. production. The remaining output came from Arizona, 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, paint, roofing, oil well drilling additives, and rubber products. The value of 2002 scrap mica production was estimated at \$7.6 million. Ground mica sales in 2001 were valued at \$28.1 million. There were nine domestic producers of scrap and flake mica.

Salient Statistics—United States:	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	2002 ^e
Production: ^{2 3}					
Mine	87	95	101	98	84
Ground	104	111	112	89	76
Imports, mica powder and mica waste	23	21	29	32	37
Exports, mica powder and mica waste	8	11	10	9	11
Consumption, apparent ⁴	137	125	119	121	111
Price, average, dollars per ton, reported:					
Scrap and flake	87	148	136	82	100
Ground:					
Wet	909	849	751	771	800
Dry	179	192	169	147	150
Stocks, producer, yearend	NA	NA	NA	NA	NA
Employment, mine, number ⁵	367	NA	NA	NA	NA
Net import reliance ⁶ as a percentage of					
apparent consumption	13	10	15	19	24

Recycling: None.

Import Sources (1998-2001): Canada, 66%; India, 20%; China, 6%; Finland, 2%; and other, 6%.

<u>Tariff</u> : Item	Number	Normal Trade Relations 12/31/02
Mica powder	2525.20.0000	Free.
Mica waste	2525.30.0000	Free.

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

Government Stockpile: None.

Events, Trends, and Issues: Domestic production of ground mica decreased in 2002. The decrease primarily resulted from reduced production in Georgia, New Mexico, North Carolina, South Carolina, and South Dakota. Development continued at a newly opened mica operation in Arizona, and the associated processing plant produced several wet ground mica products. 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, Reser	<u>ves, and Reserve E</u>	Base:		
	Mine pr	Mine production		Reserve base ⁷
	2001	<u>2002</u> ^e		
United States ²	98	84	Large	Large
Brazil	4	4	Large	Large
Canada	17	17	Large	Large
India	2	2	Large	Large
Korea, Republic of	40	40	Large	Large
Russia	100	100	Large	Large
Other countries	35	35	Large	Large
World total (rounded)	300	280	Large	Large

<u>World Resources</u>: 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.

<u>Substitutes</u>: 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.

^eEstimated. NA Not available.
¹See also Mica (Natural), Sheet.
²Sold or used by producing companies.
³Excludes low-quality sericite used primarily for brick manufacturing.
⁴Based on ground mica.
⁵Total employment at mines and mills where mica was produced and processed, excluding feldspar companies with byproduct production.
⁶Employees were not assigned to specific commodities in calculating employment.
⁶Defined as imports - exports + adjustments for Government and industry stock changes.
⁷See Appendix C for definitions.