MATERIAL SAFETY DATA SHEET



MC-X-01046 (3/85)

SPEC./MSDS NUMBER	DATE
	Nov. 4, 1985

PRODUCT IDENTIFICATION

TRADE NAME Asbestos	GENERIC NAME Chrysotile Asbestos
MANUFACTURER'S NAME -Minerals Marketing Corp. of Zimbabwe as agents for Shabanie & Mashaba Mines (Pvt) Ltd.	CAS NUMBER 12001-29-5
ADDRESS (STREET) P.O. Box 552	PHONE NUMBER (EMERGENCY) (011-263-9)76635
CITY STATE ZIP Bulawayo, Zimbabwe	CHEMICAL STRUCTURE $Mg_3(Si_2O_5)(OH)_4$

I • PRODUCT INGREDIENTS

CHEMICAL AND/OR COMMON NAME	CAS NUMBER	%	TLV/PEL
Asbestos	12001-29-5	100.0	*
*Occupational Exposure Limits			
PEL TLV		-	
2.0 f/cc -8 hr. TWA 2.0 f/cc			
Ceiling conc. ACGIH, Documentation of			
10.0 f/cc TLV's at 27			
OSHA Standard			
at 29 CFR 1910.1001			

II • PHYSICAL DATA

BOILING POINT	VAPOR PRESSURE	SPECIFIC GRAVITY	MELTING POINT
n/a	n/a	2.4-2.6	n/a
SOLUBILITY IN WATER	**VAPOR DENSITY (AIR = 1)**	**PERCENT VOLATILE**	**EVAPORATION RATE**
n/a	n/a	n/a	(=1) n/a

APPEARANCE AND ODOR
white fiberous dry material - no odor

III • FIRE AND EXPLOSION DATA

FLASH POINT	FLAMMABLE LIMITS	FLAMABLE LIMITS	LEL	UEL
n/a	n/a	n/a	n/a	n/a

EXTINGUISHING MEDIA
non-flammable. No fire or explosion hazard.

SPECIAL FIREFIGHTING PROCEDURES
none

UNUSUAL FIRE OR EXPLOSION HAZARDS
none

IV • HEALTH HAZARD INFORMATION

HAZARD BY ROUTES OF EXPOSURE (Indicate chronic and acute)

INHALATION-Chronic-Avoid inhalation. Overexposure can cause asbestosis,a scarring of the lung Pleural thickening,effusion and plaques are nondisabling conditions,seen separtely or toget that have been associated with exposure. The IARC has determined that there is sufficient evidence for the carcinogenicity of asbes humans. Caution is advised as breathing a bestos may cause serious bodily harm.

INGESTION
no increased hazard evidenced.

EYE
Acute-may cause eye irritation.

SKIN CONTACT/ABSORPTION
Acute-may cause skin irritation.

SIGNS AND SYMPTOMS ASSOCIATED WITH EXPOSURE OVER TLV -Asbestosis is associated with symptoms of lab breathing,chest pain,weakness and chest tightness. Symptoms are not usually manifest until 15-20 years after exposure.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED
Respiratory ailments.

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ANY OF PART I LISTED AS CARCINOGENS? (NTP, IARC, OSHA)
Yes

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HEALTH HAZARD INFORMATION CONTINUED ON BACK

BRAKEGATE LIMITED

6 Broad Street Place, London EC2M 7ND England

R.S.A.: P. O. Box 784521, Sandton 2146
Transvaal, South Africa
Tel: (27-11) 788-4313 • Tlx: 4-27186 SA

U.S.A.: P O Box 14095
West Allis, Wisconsin 53214
414/383-2020

November 21, 1985

Mr. E. E. Wang
J-M A/C PIPE CORPORATION
1051 Sperry Road
Stockton, CA 95206

Subject: C&G Asbestos Fiber

Dear Mr. Wang:

Please find enclosed manufacturer supplied Material Safety Data Sheet to comply with OSHA enacted Hazard Communication Standard (29 CFR 1910.1200).

Should you have any questions or need further information, please advise us.

Sincerely yours,

BRAKEGATE LIMITED

B. Heering

Enclosure

cc: Darrel Wilkinson, Stockton
Harold Stone, Denison

NOV. 25 1985

Director: Bernard Heering

V • HEALTH HAZARD INFORMATION (Continued)

EMERGENCY/FIRST AID PROCEDURES

INHALATION -Avoid breathing dust when handling,dumping,and mixing. Use respirator if airborne concentrations exceed OSHA limits (see Sec. VI).

INGESTION

EYE CONTACT
In case of eye irritation, gently rinse with water. If irritation persists get medical help.

SKIN CONTACT
Remove asbestos slivers from skin promptly. If irritation persists get medical help.

SKIN ABSORPTION
n/a

VI • CONDITIONS FOR SAFE USE (When over TLV)

RESPIRATORY PROTECTION -Reusable or single use air purifying respirator-for exposures which do not exceed the PEL (see sec.1) by more than 10X. Powered air purifying respirator-for exposures more than 10X but less than 100X, the PEL. Type "C" continous flow or pressure demand, supplied air respirator for exposures more than 100X PEL. All respirators must be NIOSH apprc

EYE PROTECTION
(see "Other.." this Sec.)

PROTECTIVE GLOVES
(See "Other.." this Sec.)

OTHER PROTECTIVE CLOTHING/EQUIPMENT -If the ceiling concentration (see Sec. 1) limit is exceeded,cloth providing whole body covering must be supplied and its use required.

VENTILATION REQUIREMENTS-Local ventilation if engineering controls are inadequate. (See Title 29 CFR Part 1910.1001, c (i) & (ii)).

VII • REACTIVITY DATA

IS MATERIAL STABLE?	WILL HAZARDOUS POLYMERIZATION OCCUR?
Yes	No
INCOMPATIBILITY	**CONDITIONS TO AVOID**
n/a	Avoid creating and breathing dust.

HAZARDOUS DECOMPOSITION PRODUCTS
None

VIII • SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATEIAL IS SPILLED OR RELEASED-Avoid creating or breathing dust. Collect dust by HEPA vacuum or in wet state(wet sweeping,wet wiping) to prevent emission of airborne fibers.

WASTE DISPOSAL METHOD -Bags,waste and scrap should be disposed of in a manner which all avoid airb concentrations of asbestos, such as the use of dust-tight trash bags or containers. Ensure that disposal complies with all applicable federal,state and local regulations.

RCRA REGULATED ☐ Yes ☐ No	RCRA NUMBER	CERCLA (Superfund) REPORTABLE QUANTITY	
DOT REGULATED ☒ Yes ☐ No	**DOT PROPER SHIPPING NAME** Asbestos	**DOT HAZARD CLASS** ORM-C	**DOT NUMBER** -

IX • SPECIAL PRECAUTIONS

SPECIAL PRECAUTIONS FOR HANDLING AND STORAGE-Do not create or breath dust. Do not dry sweep or use air hose for cleaning. Do not take protective clothing or equipment home. Use no hooks in loading o unloading. Protect containers from damage. Prevent dust release without providing proper en- closure or control measures. Use dust supression control measures, such as ventilation or wetwo at all stages of handling, use and disposal. Follow good housekeeping practices, such as wet wi dusty surfaces, to prevent accumulation of asbestos containing dust. Avoid inhalation.

OTHER PRECAUTIONS -Substantial medical evidence indicates that smoking increases the risk from asbestos exposure. Those working with asbestos should not smoke.

PREPARED BY	PHONE NO.	TITLE

While the information and recommendations set forth herein are believed to be accurate as of the date hereof, THE MANUFACTURER MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.