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PLAINTIFF'S
EXHIBIT
DUP-1588

GRACE

Construction Products Division

W. R. Grace & Co.
62 Whittemore Avenue
Cambridge, Mass. 02140

1617-876-1400

January 25, 1979

Mr. Don McCrae
E. I. DuPont & Co.
P. O. Box 1378
Louisville, Kentucky 40202

Dear Mr. McCrae:

Attached is a copy of our Material Safety Data Sheet on Industrial Vermiculite #1 size. As stated in the M.S.D.S., industrial end-users of this material should determine for themselves, whether they are in compliance with OSHA Regulation 1910.1001 with regard to in-plant exposure to airborne asbestos fibers. It has generally been our experience that where appropriate industrial hygiene practices are followed, exposures are well within the OSHA limits.

Should you elect to make such an in-plant survey, we would be interested in knowing what your results were. This kind of end-use input permits us to assemble a picture of end-use exposures with the product as we are presently controlling.

Very truly yours,

Robert C. Ericson
Robert C. Ericson
Quality Assurance Manager
Construction Products Division

RCE:M

Attachment

*HRD,
This is the sheet
Material Safety Data sheet #1
sent for our Zonolite
stock # 24-2225*

*cc: Zuffelt
Lottie
Hawn
Simon*

DUP 1153721

DU 062023

U.S. DEPARTMENT OF LABOR
DATE: June 10, 1977 Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
W. R. Grace & Company	617-876-1400 X457
ADDRESS (Number, Street, City, State, and ZIP Code)	
62 Whittemore Avenue-Cambridge, MA 02140 Quality Assurance Manager	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS
Expanded Libby, Montana Vermiculite	Industrial Vermiculite-Size #1, #2, & #3
CHEMICAL FAMILY	FORMULA
Magnesium Aluminosilicate Mineral	(Mg,Ca,K)-(Al,Fe,Mg)-(Si,Al) ₂ (OH) ₂ H ₂ O

SECTION II - HAZARDOUS INGREDIENTS

Contains less than 0.1% by weight of a naturally occurring contaminant tremolite. OSHA Regulation 1910.1001 defines tremolite as asbestos. Some forms of tremolite are platy. Other forms can be fibrillated by physical handling to release airborne "asbestos fibers". Regulation 1910.1001 places a limit of 2 "asbestos fibers"/cc; 8 hour time weighted average and a maximum of 10 "asbestos fibers"/cc at any one time for airborne fiber exposure.

The physical handling given to expanded Vermiculite can release both airborne fibers and nuisance dust. Refer to OSHA Regulation 1910.1001 for approved control procedures.

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	NA	SPECIFIC GRAVITY (H ₂ O=1)	NA
VAPOR PRESSURE (mm Hg.)	NA	PERCENT VOLATILE BY VOLUME (%)	NA
VAPOR DENSITY (AIR=1)	NA	EVAPORATION RATE (_____=1)	NA
SOLUBILITY IN WATER	slight, if any	Bulk Density lbs/c.f.	5-7
APPEARANCE AND ODOR	Free flowing dark brown to tan colored particles.		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA NOT APPLICABLE

FLASH POINT (Method used)	FLAMMABLE LIMITS	LeI	UeI
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

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(Continued on reverse side)

Form OSHA-20
Rev. May 72

The information contained herein is based on knowledge believed to be reliable but W.R. GRACE & CO. MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE ACCURACY OR ADEQUACY THEREOF. Nothing herein excuses the recipient hereof from such duties as shall be imposed by the Occupational Safety and Health Act of 1970 and regulations issued pursuant thereto.

DU 062024

SECTION V - HEALTH HAZARD DATA	
Dust respirable fraction 5 mg/m ³ Total dust 15 mg/m ³ Airborne asbestos fiber 2f/cc T.W.A.-Ceiling 10f/cc at one time.	
EMERGENCY AND FIRST AID PROCEDURES	
NA	

SECTION VI - REACTIVITY DATA				NOT APPLICABLE
STABILITY	UNSTABLE		CONDITIONS TO AVOID	
	STABLE			
INCOMPATIBILITY (Materials to avoid)				
HAZARDOUS DECOMPOSITION PRODUCTS				
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID	
	WILL NOT OCCUR			

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Dampen slightly or use other techniques which control airborne fibers and dust within the limits of Section V above.	
WASTE DISPOSAL METHOD Use disposal techniques which control airborne fibers and dust within the TLV limits of Section V above. See OSHA Standard 1910.1001. Paragraph (h) (2) Waste Disposal.	

SECTION VIII - SPECIAL PROTECTION INFORMATION

See OSHA 1910.1001-Controls such as isolation, enclosure, exhaust ventilation and dust collection shall be used if necessary to meet exposure limits. Also see OSHA Standard 1910.1001 Personal Protective Equipment for dealing with work environments in excess of exposure limits.

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
OTHER PRECAUTIONS	

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