IN RE: ABRAMS November 1992

PLAINTIFF'S EXHIBIT WH-921

PENGAD-Bayonne,N.J

MWBB-0037619

Bella

Please let me know ~~be~~ what you decide.

Jon Shoaff
5/7/81

IN RE: ABRAMS November 1992

NWBB-0037620

GRACE

Construction Products Division

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

(617) 876-1400

November 5, 1980

Mr. J. L. Shoaff
Matls. & Stds. Engineer
Westinghouse Electric Corp.
P. O. Box 341
Bloomington, IN 47401

Dear Mr. Shoaff:

This will confirm our recent phone conversation in which we discussed your October 8, 1980 letter regarding health hazards of Horticultural-grade, Terra-Lite Vermiculite.

We determined that your use of this product is not Horticultural, but for miscellaneous packaging purposes. Consequently, our Material Safety Data Sheet on Industrial Vermiculite is appropriate to your situation.

I am attaching a copy of our M.S.D.S. #Z-140 for Industrial Vermiculite, Libby source-sizes #1, #2 & #3. Our Terra-Lite product may be manufactured from any one of these three coarse grades of expanded vermiculite. When processed for this end-use, it is more intensively screened to remove fines (vermiculite dust and tremolite) and in some cases, it is treated with a binder to further reduce airborne dust when used.

We have prepared the attached Material Safety Data Sheet in a form that is most meaningful to technically aware industrial end-users who will be aware of the responsibilities placed on them by OSHA Regulations.

It has been our experience, handling significant tonnages of expanded products in our own manufacturing plants, that good industrial hygiene practices will limit the airborne exposures of employees to extremely low levels.

If you require additional information, do not hesitate to contact me.

Very truly yours,

Robert C. Ericson
Quality Assurance Manager

RCE:dm
Attachment

IN RE: ABRAMS November 1992

MWBB-0037621

U.S. DEPARTMENT OF LABOR

DATE: June 10, 1977 Occupational Safety and Health Administration

M.S.D.S. #Z-140

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 W. R. Grace & Company	EMERGENCY TELEPHONE NO. 1-617-876-1400 X 457
ADDRESS (Number, Street, City, State, and ZIP Code) 62 Whittemore Avenue-Cambridge, MA 02140	Quality Assurance Manager
CHEMICAL NAME AND SYNONYMS Expanded Libby, Montana Vermiculite	TRADE NAME AND SYNONYMS Industrial Vermiculite-Size #1,#2, & #3
CHEMICAL FAMILY Magnesium Aluminosilicate Mineral	FORMULA $(Mg,Ca,K)-(Al,Fe,Mg)-(Si,Al)_4(O)_{10}(OH)_2 H_2O$

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_2O=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	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

 (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 regula-

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

Dust respirable fraction 5 mgm/M^3. Total dust 15 mgm/M^3.

Airborne asbestos fiber 2f/cc T.W.A.-Ceiling 10f/cc at one time.

EMERGENCY AND FIRST AID PROCEDURES

NA

MMBB-0007422

SECTION VI - REACTIVITY DATA NOT APPLICABLE

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE		

INCOMPATABILITY *(Materials to avoid)*

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	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