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U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1117

DPM 1014-2

OCT 22 1980

MATERIAL SAFETY DATA SHEET

Powder, Filter, Diatomaceous Earth

SECTION I

MANUFACTURER'S NAME: Johns-Manville Corp. & Subsidiaries	EMERGENCY TELEPHONE NO.: 303/979-1000 Ext. 3119
ADDRESS (Number, Street, City, State, and ZIP Code): Ken-Caryl Ranch, Denver, Colorado 80217	
CHEMICAL NAME AND SYNONYMS: Diatomaceous earth, diatomite.	TRADE NAME AND SYNONYMS: CELITE 545
CHEMICAL FAMILY: Silica	FORMULA: Predominantly SiO_2

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS NA			BASE METAL NA		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Flux calcined diatomaceous earth	100	*
*This material contains approximately 35% crystalline silica (cristobalite). Actual percentage of cristobalite may vary. For TLV see Section V.		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H_2O=1)	2.3
VAPOR PRESSURE (mm Hg.)	—	PERCENT, VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	Slight		

APPEARANCE AND ODOR: White fine powder - no odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): Non-flammable	FLAMMABLE LIMITS	Lel	Uel

EXTINGUISHING MEDIA

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARDS

(Continued on reverse side)

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SECTION V · HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
See attached

EFFECTS OF OVEREXPOSURE
Long term exposure to high concentrations of dust may cause pulmonary disease.

EMERGENCY AND FIRST AID PROCEDURES
Avoid excessive dust inhalation.

SECTION VI · REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	X	

INCOMPATABILITY (Materials to avoid) Hydrofluoric acid

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII · SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Vacuum clean spillage. If sweeping is necessary, use dust suppressant agent. Repair broken bags.

WASTE DISPOSAL METHOD
Dispose in closed containers.

SECTION VIII · SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
NIOSH approved for protection against pneumoconiosis producing dusts.

VENTILATION		
	LOCAL EXHAUST Recommended at points of dust generation to control exposures below TLV.	SPECIAL
	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES	EYE PROTECTION
Normally not necessary	Normally not necessary

OTHER PROTECTIVE EQUIPMENT

SECTION IX · SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Avoid creating dust.
Maintain good housekeeping practices.

OTHER PRECAUTIONS
See caution label on bag.

GPO 830-540

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

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TLV (respirable dust) for 35% cristobalite is 5.1 mppcf or .14 mg/M^3. TLV's for other concentrations of cristobalite may be calculated from the formulas shown below.

§ 1910.93 Air contaminants.

* * * * *

TABLE G-3—MINERAL DUSTS

Substance	Mppcf	Mg/M³
Silica:		
Crystalline:		
Quartz (respirable)	250 [f]	10mg/M³ [e]
	%SiO₂+5	%SiO₂+2
Quartz (total dust)		30mg/M³
		%SiO₂+2
Cristobalite: Use ½ the value calculated from the count or mass formulae for quartz.		
Tridymite: Use ½ the value calculated from the formulae for quartz.		
Amorphous, including natural diatomaceous earth	20	80mg/M³
		%SiO₂
Silicates (less than 1% crystalline silica):		
Mica	20	
Soapstone	20	
Talc	20	
Portland cement	50	
Graphite (natural)	15	
Coal dust (respirable fraction less than 5% SiO₂)		2.4mg/M³
For more than 5% SiO₂		or 10mg/M³
		%SiO₂+2
Inert or Nuisance Dust:		
Respirable fraction	15	5mg/M³
Total dust	50	15mg/M³

NOTE: Conversion factors—
mppcf×35.3=million particles per cubic meter
=particles per c.c.

[f] Millions of particles per cubic foot of air, based on impinger samples counted by light-field techniques.

[g] The percentage of crystalline silica in the formula is the amount determined from air-borne samples, except in those instances in which other methods have been shown to be applicable.

[h] As determined by the membrane filter method at 430 × phase contrast magnification.

[e] Both concentration and percent quartz for the application of this limit are to be determined from the fraction passing a size-selector with the following characteristics:

Aerodynamic diameter (unit density sphere)	Percent passing selector
2	90
2.5	75
3.5	50
5.0	25
10	0

The measurements under this note refer to the use of an AEC instrument. If the respirable fraction of coal dust is determined with a MRE the figure corresponding to that of 2.4 Mg/M³ in the table for coal dust is 4.5 Mg/M³.