



724 East Sarcee Street, Kamloops, BC Canada V2H 1E7
 Ph: (250) 372-1600 TF: 1-800-667-0336 Fax: (250) 372-3777
 info@absorbentproductsltd.com www.absorbentproductsltd.com



MATERIAL SAFETY DATA SHEET

Abbreviations used on this Material Safety Data Sheet:

N/av. = Not available, N/ap. = Not applicable, ppm = parts per million, TLV = Threshold Limit Value.

NFPA Hazard Rating: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-None, X-Blank

WHMIS HAZARD RATING:

N/ap.

NFPA HAZARD RATING:

Health - 1, Flammability - 0, Reactivity - 1

SECTION I - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER	Red Lake Earth		4 - extreme
MANUFACTURER'S NAME	Absorbent Products Ltd.		3 - high
STREET ADDRESS	724 East Sarcee St.		2 - moderate
CITY/PROVINCE	Kamloops, BC		1 - slight
POSTAL CODE	V2H 1E7		0 - insignificant
EMERGENCY TELEPHONE NUMBER:	1-800-667-0336		
CHEMICAL NAME:	Diatomaceous Earth		
TRADE NAME:	APL Diatomaceous Earth		
CHEMICAL FAMILY:	Silica		
MATERIAL USE:	Agricultural / Industrial Absorbent		

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENT	%	CAS NUMBER OR UN NUMBER OR NA NUMBER	OSHA PEL (ACGIH TLV)	LD50/ LC 50 SPECIES AND ROUTE
Diatomaceous Earth	Typical Analysis 65%	61790-53-2	see below	N/av.
Free Crystalline Silica or Silica, quartz	<1%	14808-60-7	N/av.	N/av.

For sampling silica dusts refer to NIOSH Analytical Method 7500 or OSHA method ID 142

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE	solid	ODOR AND APPEARANCE	No odor, Buff grey to off-white
VAPOR PRESSURE (mm Hg)	N/ap.	DENSITY (20 degrees Celcius)	35lb/cu. ft.
VAPOR DENSITY (Air = 1)	N/ap.	SOLUBILITY IN WATER	Insoluble, forms
SPECIFIC GRAVITY (Water=1)	2.3		colloidal suspension
FREEZING POINT	N/ap.	pH	5-6 (10% slurry)
BOILING POINT	N/ap.		slightly acidic in water

SECTION IV - FIRE AND EXPLOSION DATA

FLAMMABILITY (IF YES, UNDER WHICH CONDITIONS?)	YES	NO	X
MEANS OF EXTINCTION	N/ap.	SPECIAL PROCEDURES	N/ap.
FLASHPOINT AND METHOD	N/ap.	UPPER FLAMMABILITY LIMIT (% BY VOLUME)	N/ap.
AUTOIGNITION TEMPERATURE	N/ap.	LOWER FLAMMABILITY LIMIT (% BY VOLUME)	N/ap.
HAZARDOUS COMBUSTION PRODUCTS	N/ap.		
EXPLOSION DATA:			
SENSITIVITY IMPACT	No	SENSITIVITY TO STATIC DISCHARGE	No

MATERIAL SAFETY DATA SHEET - Page 2

MATERIAL IDENTIFIER: RED LAKE EARTH

SECTION V - HEALTH HAZARDS

Routes of Exposure and Effects:

Inhalation: Acute (short term) exposure to dust levels exceeding the PEL may cause irritation of respiratory tract resulting in a dry cough. Chronic (long term) exposure to crystalline free silica contained by airborne diatomaceous earth and bentonite dust where levels are higher than TLV's may lead to the development of silicosis or other respiratory problems. Persistent dry cough, throat irritation and labored breathing on exertion are symptomatic. exposure may aggravate existing upper respiratory tract diseases such as asthma, bronchitis or emphysema.

Eyes: Irritant.

Skin: Possible drying results in dermatitis.

Ingestion: No adverse effects.

Permissible Exposure Limits: (for airborne, nuisance dusts)	OSHA PEL	ACGIH	CAS
Diatomaceous earth	8 hr TWA	TLV	8 hr EL
Total dust	15 mg/m ³	Not detected	4 mg/m ³
Respirable dust	5 mg/m ³	Not detected	1.5 mg/m ³
Crystalline quartz (respirable)	0.1 mg/m ³	0.1 mg/m ³	0.1 mg/m ³

Note: If crystalbolite or tridymite are present, use 1/2 of the OSHA PEL or ACGIH TLV for crystalline quartz.

Diatomaceous Earth is listed and IARC Monograph 42 (1987) rates crystalline free silica as Category 2A.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT

Exposure to quantities of crystalline silica dust, in the forms of quartz, crystalbolite or tridymite, may be present in airborne dust. If the concentration levels are in excess of the OSHA Permissible Limit (PEL-TWA 8hrs) of 0.05mg/m³ or the ACGIH Threshold Limit Value (TLV) of 0.05mg/m³, the crystalline silica is a known cause of silicosis, a progressive, sometimes fatal, lung disease. From the International Agency for Cancer Research (IARC), a 1987 review of "Silica and Some Silica" coded Monograph 42 concluded crystalline free silica was rated in Category 2AA as "probable carcinogen to humans." NTP rates "Silica, crystalline (respirable)" - "reasonably anticipated to be a carcinogen". OSHA has not classified Crystalline Free Silica as a carcinogen.

Inhalation of crystalline free silica dust below the permissible exposure limits of occupational standard setting agencies will minimize, if not eliminate, potential risk of lung cancer.

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY (IF NO, UNDER WHICH CONDITIONS)	YES	X	
INCOMPATIBILITY WITH OTHER SUBSTANCES (IF YES, WHICH ONES)	YES	X	Hydrofluoric acid - silica may react violently
REACTIVITY, AND UNDER WHAT CONDITIONS		N/ap.	
HAZARDOUS DECOMPOSITION PRODUCTS		N/ap.	

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

PERSONAL PROTECTIVE EQUIPMENT

Bureau of Mines or NIOSH approved respirators for protection against pneumoconiosis producing dusts recommended when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use quarter or half mask respirator with replacement dust filter or single use dust respirator with valve. If dust concentration is greater than ten (10) times and less than one hundred (100) times the PEL use full faceplate respirator with replaceable dust filter; if greater than one hundred (100) and less than two hundred (200) times the PEL use power air purifying (positive pressure) respirator with replaceable filter; if greater than two hundred (200) times the PEL use type C, automatic-air respirator, continuous flow type (positive pressure), with full facepiece, head or helmet.

GLOVES (SPECIFY)	Not needed under normal conditions of use.
RESPIRATOR (SPECIFY)	Avoid breathing dust. Use respirators approved NIOSH/OSHA for silica bearing dust.
EYE (SPECIFY)	Use protective goggles in high dust conditions.
FOOTWEAR (SPECIFY)	As required on jobsite.

