



## MATERIAL SAFETY DATA SHEET

### “DIATOMITE – DIATOMACEOUS EARTH”

#### IDENTIFICATION

Product Name: Diatomite (-7mm+2mm) premium grade  
Diatomite (-2mm+0.5mm) premium grade  
Diatomite (-15mm+7mm) premium grade

Uses: Pet Litter and for absorbing water, oil and chemical spills, growing medium for Roses, Orchids, Gerberas, all gardens, pot plants & Hydroponics (aeration & slow release of water and nutrient) in horticulture.

Physical Description: Granules (2mm to 7mm), (0.5mm to 2mm), (7mm to 15mm) and (+15mm)

#### INGREDIENTS

Diatomite (diatomaceous earth) is composed principally of amorphous silicon dioxide containing almost no detectable crystallinity, in particular, no cristobalite, tridymite or quartz were detectable, at detection limits of around 0.1%.

#### HEALTH HAZARD INFORMATION

Swallowed: Not applicable.  
Eye: Particles will irritate the eye in the same way as any other foreign body.  
Skin: Not applicable.  
Inhaled: The only route of entry, all fine dust has been removed prior to sale.

#### PRECAUTIONS FOR USE

Exposure Limits: Due to the low levels of hazardous substances, this material is essentially non-toxic and non-hazardous. Exposure standards for nuisance dust apply. If dust (material of particle size less than 10 microns and invisible to the naked eye) is created (eg. by grinding or milling) when using this product, precautions for use should be followed: Ensure there is adequate ventilation of the work area.

Personal Protection: Where respiratory protection is required, use a respirator of particulate standard described in A.S. 1715 and 1716.

Flammability: This material is not flammable.

#### SAFE HANDLING INFORMATION

Storage and Transport: There are no special hazards.  
Spills and Disposal: Not Applicable.  
Fire/Explosion Hazard: None.

#### CONTACT POINT

Further information (Amdel Limited Report 6A0%424) can be obtained from Diatomite Canada.

**DISCLAIMER:** The data claimed herein is based on information that Diatomite Canada believes to be reliable. No expressed or implied warranty is made with regard to the accuracy or such data or its suitability for a given situation. Such data relates only to the specific product described and not to such products in combination with any other product. Diatomite Canada its affiliation companies, agents and representatives disclaim all liabilities for any actions taken or forgone on reliance upon the same.

**“Diatomite”** is rich source of plant available silica which is widely documented to stimulate Self Acquired Resistance (SAR) in plants thereby increasing their resistance to disease. Diatomite consists of the skeletal remains of microscopic single cell aquatic plants known as diatoms. These small plants developed an opaline silicious shell like armour for protection, upon the death of these plants the fossil shells accumulated on the beds of these fresh water lakes and compacted into lightweight porous rock.

### PHYSICAL PROPERTIES

Colour .....White, cream to yellow  
 Moisture .....Approx. 6%  
 Bulk Density .....Approx. 0.4  
 pH ..... 5.7  
 EC (Electrical Conductivity) ..... (mS/cm) = 0.05 – Little to no salt content

### TOTAL ELEMENTAL ANALYSIS

<u>Category</u>	<u>Element</u>	<u>Results:</u>	<u>Comments</u>
Major Elements %	Nitrogen (N)	0.013	low
	Phosphorous (P)	0.083	low
	Potassium (K)	0.087	low
Minor Elements %	Calcium (Ca)	0.014	low
	Magnesium (Mg)	0.185	some magnesium present
	Sulphur (S)	0.0030	low
	Sodium (Na)	0.092	good – low sodium salts
	Chloride (Cl)	0.0012	good – low chloride salt
Trace Elements mg/kg	Iron (Fe)	31100	very good iron content
	Manganese (Mn)	19	low
	Zinc (Zn)	110	OK can be of some use in
agriculture	Copper (Cu)	8.2	low
	Boron (B)	0.85	low
	Molybdenum (Mo)	1.7	low
Heavy Metals mg/kg	Arsenic (As)	4.6	low – good
	Cadmium (Cd)	<0.5	below detection limits – good
	Cobalt (Co)	5.8	low – good
	Chromium (Cr)	7.1	low – good
	Lead (Pb)	7.4	low – good
	Mercury (Hg)	<0.2	below detection limits – good
	Selenium (Se)	0.61	good
	Nickel (Ni)	9.9	good
	Silver (Ag)	<0.5	below detection limits – good

Iron and silica levels are quite good and should make a positive contribution to plant nutrition. Both total and water soluble silica levels are very good, making this product a suitable growing media. There are no heavy metal contaminant concerns with the use of this product.