



## Tourmaline Marketing & Inv. Company

30 May, 2006

### DEAD SEA BLACK MUD

#### MATERIAL SAFETY DATA SHEET

##### 1) General:

Trade Name:	Dead Sea Mineral Mud
INCI Name:	Dead Sea Sterilized Mud
Chemical Identity:	Natural sediment, mixture of solid mineral clays with interstitial solution of inorganic salts and Sulfide compounds originated from microbiological activity.

##### 2) Chemical & Physical Properties:

Appearance (25°C):	Black paste solid with characteristic odor.
Purity:	98.0 - 99.8%
Particles sizes:	a > 0.2mm 1.0 - 6.0%
	b 0.05-0.2mm 3.0 - 9.0%
	c < 0.05mm 86.0 - 92.0%
Specific Density (25°C):	1.63 - 1.73 g/ml
pH Value (5%/w Sol., 25°C):	6.6 - 7.6
Loss on drying (105°C Over Night):	30.0 - 38.0 %/w
Radioactivity:	Not above normal background
Heavy Metals:	Less than 20 ppm
Lead (Pb):	Less than 10 ppm
Arsenic:	Less than 2 ppm
Microbiology (Total Count):	500 cpu/g and no-pathogenic

##### 3) Physical Data:

###### Solid Phase (62-70%/W):

HCL Soluble: Carbonates (30 - 40%): Calcite, Dolomite, Aragonite

Non Soluble Matter: Silicates (30 - 40%): Quarts, Montmorillonite, Feldspar, Kaolinite

###### Liquid Phase (30-38%/w, Total Salinity

###### 22.0-30.0%/w):

Chloride (Cl <sup>-</sup> ):	159-190 g/l
Sodium (Na <sup>+</sup> ):	22-32 g/l
Magnesium (Mg <sup>2+</sup> ):	30 - 40 g/l
Calcium (Ca <sup>2+</sup> ):	10 - 15 g/l
Potassium(K <sup>+</sup> ):	6 - 8 g/l
Additives:	None

##### 4) Fire and Explosive Hazard Data:

Flash point:	Not applicable
Flammable Limits:	Not applicable
Extinguishing Media:	Not applicable
Special Fire Fighting Procedures:	None
Fire and Explosion Hazards	None



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### 5) Health Hazard Data:

Threshold Limit Value:	No specific TLV has been established
Nuisance Particulate TLV:	10 mg/m <sup>3</sup>
Effects of overexposure:	Avoid contact with eyes, mouth and genital areas. Avoid full dryness on the skin.
Emergency and First aid Procedures:	Eyes-immediately flush with plenty of water. Skin-wash with water.

### 6) Reactivity Data:

Stability:	Stable
Conditions to avoid:	Exposure to high temperatures can accelerate precipitation of the dispersion, free saline liquid will separate.
Incompatibility:	Avoid contact with metals
Hazardous Decomposition Products:	None

### 7) Steps in case Material is released or spilled:

Shovel or sweep up and place in waste disposal container. Flush Area with water. Disposal must be made in accordance with local regulations.

### 8) Special Protection Information:

Respiratory Protection:	None
Ventilation:	None
Protective Gloves:	Required
Eye Protection:	Safety glasses are recommended
Other protective equipment:	Not required

### 9) Special Handling and Storage Precautions:

Avoid exposure to high temperature that can cause precipitation. Avoid metal packing. The material should be kept in tightly closed plastic container, in dry and shaded place.

### 10) Toxicological Data:

With correct handling, according to instructions, the material is not danger to humans.  
For external use only! Keep out of children's hands!

### 11) Ecological Data:

Avoid direct contact with houseplant.



شركة ترمالين للتسويق والاستثمار  
Tourmaline Marketing & Inv. Co.

For TOURMALINE MARKETING & INV. COMPANY