

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION		
PRODUCT IDENTIFIER	DEsect™	
CHEMICAL NAME	Diatomaceous Earth, Natural	
CHEMICAL FAMILY	Silica	
MATERIAL USE	Natural pesticide	
RESTRICTION ON USE	None Known	
MANUFACTURER	EP Minerals, LLC., 9875 Gateway Dr., Reno, NV 89521	
TELEPHONE NO.	(775) 824 7600 (Monday – Friday 8:00 am PST – 5:00 pm PST)	
EMERGENCY TELEPHONE NO.	(775) 824 7600 (Monday – Friday 8:00 am PST – 5:00 pm PST)	
SDS DATE OF PREPARATION	May 10, 2014	
SECTION 2: HAZARDS IDENTIFICATION		
OSHA GHS HAZARD CLASSIFICATION	Carcinogen Category 1A	
HAZARDS NOT OTHERWISE CLASSIFIED	None	
LABEL ELEMENTS	<p>DANGER May cause cancer by inhalation. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear eye protection. If exposed or concerned: Get medical advice/attention. Dispose of contents in accordance with local, state and federal regulations.</p>	
SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS		
INGREDIENT IDENTIFICATION	APPROXIMATE CONCENTRATION (%)	C.A.S. NUMBERS
Diatomaceous Earth, Natural (kieselguhr)	100%	61790-53-2
Crystalline Silica (Quartz)	<1%	14808-60-7
SECTION 4: FIRST AID MEASURES		
EYE	Flush eyes with generous quantities of water or eye rinse solution. Consult physician if irritation persists.	
SKIN	Use moisture renewing lotions if dryness occurs.	
INGESTION	Drink generous amounts of water to reduce bulk and drying effects.	
INHALATION	Remove to fresh air. Blow nose to evacuate dust.	
Most important symptoms/effects, acute and delayed	Dust may cause abrasive irritation to eyes. Prolonged skin contact may cause dryness. Dust may cause nose, throat and upper respiratory tract irritation. Prolonged inhalation of high concentration of dust may cause lung effects. This product contains a small amount of naturally occurring crystalline silica. Respirable crystalline silica may cause lung cancer and lung disease if inhaled for prolonged periods. See Section 11 for additional information.	
Indication of immediate medical attention and special treatment, if necessary	Immediate medical attention is not normally required. If dust irritates the eyes, seek medical attention.	

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SECTION 5: FIRE FIGHTING MEASURES				
EXTINGUISHING MEDIA	Not applicable, the material is not combustible.			
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	Not applicable, the material is not combustible.			
SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS	Not applicable, the material is not combustible.			
SECTION 6: ACCIDENTAL RELEASE MEASURES				
PERSONAL PRECAUTIONS	If dust is present, use respirator fitted with particulate filter as specified in Section 8. Protect eyes with goggles.			
ENVIRONMENTAL PRECAUTIONS	This material is not a significant environmental concern.			
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	Vacuum clean spillage, wet sweep or wash away. Avoid creating dust. Place in a container for use or disposal.			
SECTION 7: HANDLING AND STORAGE				
PRECAUTIONS FOR SAFE HANDLING	Minimize dust generation. Avoid contact with eyes. Avoid breathing dust. Repair or dispose of broken bags. Observe all label precautions and warnings.			
CONDITIONS FOR SAFE STORAGE	Store in a dry place to maintain packaging integrity and product quality. Do not store near hydrofluoric acid or strongly basic solutions.			
SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION				
EXPOSURE GUIDELINES:				
Component	OSHA PEL	ACGIH TLV	MSHA PEL	NIOSH REL
Diatomaceous Earth, Natural (kieselguhr)	$\frac{80 \text{ mg/m}^3}{\% \text{ SiO}_2}$ total dust	None Established	5 mg/m ³	6 mg/m ³
Crystalline Silica (Quartz)	$\frac{30 \text{ mg/m}^3}{\% \text{ SiO}_2+2}$ total dust	0.25 mg/ m ³ Respirable dust	$\frac{30 \text{ mg/m}^3}{\% \text{ SiO}_2+2}$ total dust	0.05 mg/ m ³ Respirable dust
	$\frac{10 \text{ mg/m}^3}{\% \text{ SiO}_2+2}$ Respirable dust		$\frac{10 \text{ mg/m}^3}{\% \text{ SiO}_2+2}$ Respirable dust	
ENGINEERING CONTROLS	Use general or local exhaust ventilation to control dust within recommended exposure limits. Refer to ACGIH publication "Industrial Ventilation" or similar publications for design of ventilation systems.			
PERSONAL PROTECTIVE EQUIPMENT:				
EYE / FACE PROTECTION	Goggles to protect from dust			
SKIN PROTECTION	No special equipment is needed.			
RESPIRATORY PROTECTION	Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use a quarter or half-mask respirator with a N95 dust filter or a single use dust mask rated N95. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two hundred (200) times the PEL use a power air-purifying (positive pressure) respirator with a replaceable N95 filter. If dust concentration is greater than two hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet.			
GENERAL HYGIENE	Avoid breathing dust. Avoid contact with eyes. Wash hands after handling and before eating or drinking.			

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, COLOR	Buff to off white powder	ODOR	Odorless
PHYSICAL STATE	Solid	ODOR THRESHOLD	Not applicable
VAPOR PRESSURE	Not applicable	VAPOR DENSITY	Not applicable
BOILING POINT	Not applicable	MELTING POINT	> 1300° C
FLASH POINT	Not applicable	pH (10% SUSPENSION)	6-8
FLAMMABILITY LIMITS	Not applicable	EVAPORATION RATE	Not applicable
DECOMPOSITION TEMPERATURE	> 1300° C	SPEC. GRAVITY / RELATIVE DENSITY	2.0
AUTOIGNITION TEMPERATURE	Not applicable	PARTITION COEFFICIENT – n-OCTANOL/WATER	Not applicable
FLAMMABILITY (solid/gas)	Not applicable	SOLUBILITY – WATER	< 2%
		VISCOSITY	Not applicable

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	Material is not reactive.
CHEMICAL STABILITY	Material is stable.
POSSIBILITY OF HAZARDOUS REACTIONS	Material is not reactive under normal conditions us use.
CONDITIONS TO AVOID	Not applicable
INCOMPATIBLE MATERIALS	Products containing silica may react violently with hydrofluoric acid and strongly basic solutions.
HAZARDOUS DECOMPOSITION PRODUCTS	Not applicable

SECTION 11: TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS	
Likely Routes of Exposure	See below
EYE	May cause irritation (tear formation and redness) if dust gets in eyes.
SKIN	Not absorbed by the skin, but may cause dryness if prolonged exposure.
INGESTION	Ingestion of small to moderate quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach.
INHALATION	Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation.
CHRONIC EFFECTS	This product contains a small amount of naturally occurring crystalline silica. Respirable crystalline silica may cause lung cancer and lung disease (silicosis) if inhaled for prolonged periods. Testing indicates that the crystalline silica present in this product is not of respirable size so the risk of chronic health effects from exposure to this product is expected to be very low. Chronic inhalation of dust should be avoided.
CARCINOGENICITY	This natural product is composed predominantly of amorphous silica, but can contain a small fraction (< 1%) of crystalline silica. Amorphous silica is not classifiable as carcinogenic to humans (classified in Group 3). Respirable crystalline silica (quartz) is classified by IARC and NTP as a known human carcinogen. Crystalline silica only causes cancer when inhaled in a respirable form. It does not cause cancer by any other route of exposure. Testing indicates that the crystalline silica present in this product is not of respirable size so the risk of cancer from exposure to this product is expected to be very low.
NTP	Diatomaceous Earth, Natural is not classified as a carcinogen. Respirable crystalline silica (quartz) is classified by as a known human carcinogen.
IARC	Diatomaceous Earth, Natural is not classifiable as to carcinogenicity in humans (Group 3). Respirable crystalline silica (quartz) is classified by as a known human carcinogen.
NUMERICAL MEASURES OF TOXICITY	No data available

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CORROSIVENESS, SENSITIZATION, IRRITANCY	Not applicable										
REPRODUCTIVE TOXICITY	Not available										
TERATOGENICITY, MUTAGENICITY	Not available										
SECTION 12: ECOLOGICAL INFORMATION											
ECOTOXICITY:	Diatomaceous earth products have shown some efficacy as a natural insecticide, but otherwise have no demonstrated toxicity in regards to aquatic or terrestrial life.										
PERSISTENCE AND DEGRADABILITY	Non-biodegradable, inert.										
BIOACCUMULATIVE POTENTIAL	Little potential for bioaccumulation										
MOBILITY IN SOIL	No mobility										
OTHER ADVERSE EFFECTS	None known										
SECTION 13: DISPOSAL CONSIDERATIONS											
WASTE DISPOSAL	If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations or in slurry to sumps. Not considered a hazardous waste under RCRA (40CFR Part 261).										
PACKAGING DISPOSAL	Dispose of in accordance with applicable laws and regulations, typically solid waste disposal common to landfill type operations.										
SECTION 14: TRANSPORT INFORMATION											
BASIC SHIPPING INFORMATION	DOT shipping classification 55 (no restrictions). Technical name is "Diatomaceous Earth".										
ADDITIONAL INFORMATION	No special requirements or placarding necessary.										
SECTION 15: REGULATORY INFORMATION											
U.S. FEDERAL:											
TSCA	Diatomaceous Earth, Natural appears on the EPA TSCA inventory list.										
CERCLA	Diatomaceous Earth, Natural is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.										
SARA TITLE III	Not listed.										
California Proposition 65:	This product contains crystalline silica, a chemical known to the State of California to cause cancer.										
INTERNATIONAL:											
WHMIS Classification	Class D-2-A										
WHMIS Ingredient Disclosure List	No reportable ingredients are present.										
SECTION 16: OTHER INFORMATION											
	 <p>4-Extreme 3-High 2-Moderate 1-Slight 0-Insignificant</p>		<table border="1"> <tr> <td>0*</td> <td>Health</td> </tr> <tr> <td>0</td> <td>Flammability</td> </tr> <tr> <td>0</td> <td>Reactivity</td> </tr> <tr> <td>E</td> <td>Protective Equipment</td> </tr> </table>	0*	Health	0	Flammability	0	Reactivity	E	Protective Equipment
0*	Health										
0	Flammability										
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E	Protective Equipment										
ORIGINAL ISSUE DATE	September 17, 2012										
REVISION DATE	May 10, 2014										
REVISION NO.	3										

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