

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT IDENTIFIER	OPTISORB
CHEMICAL NAME	Diatomaceous Earth, Natural
CHEMICAL FAMILY	Silica
MATERIAL USE	Industrial Absorbent
RESTRICTION ON USE	None Known
MANUFACTURER	EP Minerals, LLC., 9785 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	October 31, 2013

**SECTION 2: HAZARDS IDENTIFICATION**

OSHA GHS HAZARD CLASSIFICATION	Not classified as hazardous
HAZARDS NOT OTHERWISE CLASSIFIED	None
LABEL ELEMENTS	No GHS labeling required

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

INGREDIENT IDENTIFICATION	APPROXIMATE CONCENTRATION (%)	C.A.S. NUMBERS	EINECS
Diatomaceous Earth, Natural (kieselguhr)	100%	61790-53-2 or 7631-86-9	231-545-4

**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..
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)	80 mg/m <sup>3</sup> % SiO <sub>2</sub> total dust	None Established	5 mg/m <sup>3</sup>	6 mg/m <sup>3</sup>
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 granules	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)	7
FLAMMABILITY LIMITS	Not applicable	EVAPORATION RATE	Not applicable
DECOMPOSITION TEMPERATURE	> 1300° C	SPEC. GRAVITY / RELATIVE DENSITY	2.2
AUTOIGNITION TEMPERATURE	Not applicable	PARTITION COEFFICIENT – n-OCTANOL/WATER	Not applicable
FLAMMABILITY (solid/gas)	Not applicable	SOLUBILITY – WATER	< 1%
		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.
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	See below and Section 11 for additional information
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 inhalation of dust should be avoided.
CHRONIC EFFECTS	Chronic inhalation of dust in excess of the Permissible Exposure Limit (PEL) established by OSHA over a prolonged number of years may cause lung changes.
NTP	Diatomaceous Earth, Natural is not classified as a carcinogen.
IARC	Diatomaceous Earth, Natural is not classifiable as to carcinogenicity in humans (Group 3).
NUMERICAL MEASURES OF TOXICITY	No data available

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CORROSIVENESS, SENSITIZATION, IRRITANCY		Not applicable			
REPRODUCTIVE TOXICITY		Not available			
TERATOGENICITY, MUTAGENICITY		Not available			
<b>SECTION 12: ECOLOGICAL INFORMATION</b>					
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			
<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>					
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.			
<b>SECTION 14: TRANSPORT INFORMATION</b>					
BASIC SHIPPING INFORMATION		DOT shipping classification 55 (no restrictions). Technical name is "Diatomaceous Earth".			
ADDITIONAL INFORMATION		No special requirements or placarding necessary.			
<b>SECTION 15: REGULATORY INFORMATION</b>					
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		These products are not regulated by WHMIS			
WHMIS Ingredient Disclosure List		No reportable ingredients are present.			
<b>SECTION 16: OTHER INFORMATION</b>					
		<div style="display: flex; align-items: center; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">             NFPA   </div> <div style="border: 1px solid black; padding: 5px;">             4-Extreme              3-High              2-Moderate              1-Slight              0-Insignificant           </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">             HMIS   </div> <div style="border: 1px solid black; padding: 5px;">             0 Health              0 Flammability              0 Reactivity              E Protective Equipment           </div> </div>			
ORIGINAL ISSUE DATE		March 4, 1994			
REVISION DATE		March 10, 2015			
REVISION NO.		9			

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