

SECTION 1: Identification

PRODUCT NAME: **Zorbent®**

GHS PRODUCT IDENTIFIER: Absorbent

SYNONYMS: Amorphous silica with natural dust suppressant.

PRODUCT CODES: UPC 10000, 10002, 10004 (GHS product code not assigned)

MANUFACTURER: MetaMatrix, LLC

DIVISION: Not applicable

ADDRESS: 5717 Arapahoe Ave., Boulder, CO 80303

EMERGENCY PHONE: 1-888-352-4337

CHEMTREC PHONE: None

OTHER CALLS: 1-303-449-8020

FAX PHONE: 1-303-449-6753

CHEMICAL NAME: Amorphous silica, mixture

CHEMICAL FAMILY: Volcanic glass

CAS #: Mixture, not assigned, however, #7631-86-9, is the principal ingredient

CHEMICAL FORMULA: Matrix: Mixture of SiO₂, Al₂SiO₅, K₂SiO₃, Na₂SiO₃ and trace amounts of Fe, Ca, & Mg. Dust/Odor Suppressant: Proprietary(non-hazardous)

PRODUCT USE: Absorbent and Odor Suppressant

PREPARED BY: Richard J Kraemer, PhD

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW: Avoid contact with eyes. Do not ingest.

ROUTES OF ENTRY: Eyes, ingestion, inhalation.

POTENTIAL HEALTH EFFECTS

EYES: This product may be a hazard in case of eye contact (irritant).

INGESTION: Not hazardous but to be avoided.

INHALATION: Coughing, irritation of nose & throat; blow nose to evacuate product.

SKIN: This product will dry skin and could be an irritant. It is not absorbed by the skin.

ACUTE HEALTH HAZARDS: Eye irritant and drying of the skin.

CHRONIC HEALTH HAZARDS: Not established.

CRONVERTING HAZARDOUS LIQUID TO NON-HAZARDUS LIQUIDS: **Not possible with Zorbent.**

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Irritated skin, e.g., open wounds, pre-existing rash. Eye inflammation or pre-existing ocular symptoms.

CARCINOGENICITY

OSHA: ACGIH: NTP: IARC:

Not known to contain any chemicals at reportable quantities that are listed as carcinogens by:

OSHA, ACGIH, NTP or IRAC.

NOTES: This product is **NOT** considered a Hazardous Material.

	<u>Range</u>	<u>Limit</u>
CAS # 7631-86-9 , mineral mixture	88 – 98%	100%
Proprietary dust suppressant,	2 – 10%	0%

SECTION 3: COMPOSITION OF INGREDIENTS

INGREDIENT

CAS #: # 7631-86-9	% WT	% VOL
REPORTABLE	<u>ppm</u>	<u>mg/m3</u>
OSHA PEL-TWA:	Not established	Not established
OSHA PEL STEL :	Not established	Not established
OSHA PEL CEILING:	Not established	Not established
ACGIH TLV-TWA:	Not established	10mg/m3 Total dust*
ACGIH TLV STEL:	Not established	Not established
ACGIH TLV CEILING:	Not established	Not established

NOTES: * This value applies only to the untreated matrix. Treated Zorbent has a dust suppressant (See above) to prevent it from becoming airborne.

SECTION 4: FIRST AID MEASURES

EYES: Do not rub eyes. Flush eyes with copious amounts of water to remove any small particles. Consult a physician if irritation persists.

SKIN: Wash skin with clean water to remove product. Consult a physician if irritation persists.

INGESTION: Not established. Consult a physician.

INHALATION: Remove from area; drink water to clear throat; blow nose to evacuate particles.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: This product should be considered like sand when treating any emergencies.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT : Not applicable

NFPA HAZARD CLASSIFICATION

HEALTH: Not established FLAMMABILITY: Not established REACTIVITY: Not established

Notes: Hazardous liquids retain their hazardous characteristics and designation when absorbed by Zorbent.

HMIS HAZARD CLASSIFICATION

HEALTH: Not established

FLAMMABILITY: Not established (**Fresh Zorbent is not flammable, however, the absorbed spill if flammable retains flammable characteristic when absorbed into Zorbent.**)

REACTIVITY: Not established.

EXTINGUISHING MEDIA: For absorbed spill see spill liquid SDS sheet.

SPECIAL FIRE FIGHTING PROCEDURES: Respiratory and Eye protection is required for fire fighting personal. For absorbed spill see spilled liquid SDS sheet.

UNUSUAL FIRE AND EXPLOSION HAZARDS (See Notes this section) Keep Zorbent that is saturated with oil and flammable liquids away from flames. For absorbed liquid spill see section;

UNUSUAL FIRE AND EXPLOSION HAZARDS on spilled liquid SDS sheet.

HAZARDOUS DECOMPOSITION PRODUCTS: None

Notes: Flammable liquids retain their flammable characteristics when absorbed by Zorbent. Liquids absorbed into or on all loose absorbents, including Zorbent, lower the flash point of the absorbed liquid (mixture). For example: Liquids that resist ignition when spilled may be ignitable when absorbed into or on a particle absorbent such as clay, diatomaceous earth, Zorbent or similar loose absorbent. An example of such a liquid is waste auto oil.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Sweep or vacuumed clean. Dispose of unused Zorbent as a non-hazardous waste.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Keep dry. Repair all broken bags.

OTHER PRECAUTIONS: Liquids that resist ignition when spilled sometimes will ignite when picked up by Zorbent or any loose absorbent. For example, spilled motor oil will not ignite with a common kitchen match but will ignite when picked up by Zorbent or any other loose absorbent. (See *Notes* in Section 5 for details.)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Ensure that eyewash stations are close to work stations.

VENTILATION : Keep well ventilated.

RESPIRATORY PROTECTION: Dust mask where airborne concentrations are expected to exceed exposure limits.

EYE PROTECTION: As a minimum, safety glasses with side shields.

SKIN PROTECTION: Gloves (optional).

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: None

WORK HYGIENIC PRACTICES: Follow good housekeeping practices.

EXPOSURE GUIDELINES: None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White to gray granular material.

ODOR: Slight mild odor.

PHYSICAL STATE: Granular

pH AS SUPPLIED: Not applicable(solid).

pH (Other): Water slurry, 6.5 to 8

BOILING POINT: NA

F: NA

C: NA

MELTING POINT: Matrix

F: 1562° to 1652°

C: 850° to 900°

EFFECTIVE DENSITY: 2 - 9 lbs. per cubic foot.

@ F: 68°

C: 20°

EVAPORATION RATE: NA

SOLUBILITY IN WATER: <1%

PERCENT SOLIDS BY WEIGHT: 88-98% %

PERCENT VOLATILE: 0

VOLATILE ORGANIC COMPOUNDS (VOC): None

MOLECULAR WEIGHT: Mixture, NA

VISCOSITY: Solid, NA

SECTION 10: STABILITY AND REACTIVITY

STABLE

UNSTABILITY:

Yes

No

CONDITIONS TO AVOID (STABILITY): For Zorbent saturated with a flammable spill avoid flames.
Flammable liquids remain flammable when absorbed by Zorbent.

INCOMPATIBILITY (MATERIAL TO AVOID): **Hydrofluoric acid**- forms toxic silicon tetrafluoride gas.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None

HAZARDOUS POLYMERIZATION: Does not occur.

CONDITIONS TO AVOID (POLYMERIZATION): None. Does not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: None available. The matrix is considered non-hazardous by the FDA and when airborne, it is considered a nuisance dust by the EPA. OSHA: The dust suppressant is a non-toxic, organic, natural substance approved by the FDA.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: The matrix will not biodegrade but the dust suppressant will biodegrade.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Non-hazardous landfill.

RCRA HAZARD CLASS: Not established.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: Cleaning compound

CLASS: 55 Non- hazardous.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS- Amorphous silica with a dust suppressant is not known to be regulated by the US, state or International statutes.

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: Prepared by: Richard J. Kraemer, PhD, CEO MetaMatrix, LLC.

DISCLAIMER: As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable GHS regulations, Federal and State law(s). However, no warranty or representation with respect to such information is intended or given.