

Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication
Standard, 29 CFR 1910.1200.
Standard must be consulted for
specific requirements.

**U.S. Department of Labor**

Occupational Safety and Health
Administration (Non-Mandatory
Form) Form Approved OMB No.
1218-0072

IDENTITY (as used on Label and List) :**Sand, Silica****NOTE:**

Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION I : IDENTIFICATION**MANUFACTURER'S NAME:**

Universal Aggregate Solutions

EMERGENCY TELEPHONE NUMBER:

1-800-222-1222

**ADDRESS (NUMBER, STREET, CITY, STATE and
ZIP CODE):**

26825 Haywood Worm Farm Road

TELEPHONE NUMBER FOR INFORMATION:

1-352-365-6522

DATE PREPARED:

3/14/2014

Okahumpka, FL 34762

SIGNATURE OF PREPARER (optional)*C. Rodriguez*

To Purchasers/Users: This MSDS contains important safety, health and environmental information. Federal regulations require that employers make this information available to their employees. If you are a reseller of this product, you should supply a copy of this MSDS to purchasers.

SECTION II : HAZARD(S) IDENTIFICATION**EMERGENCY OVERVIEW:**

Sand from the Universal Aggregate Solutions is a light colored to tan multicolored sand with no odor. It is not flammable, combustible, or explosive. It can cause irritation to the eyes. A single exposure will not result in serious adverse health effects. Crystalline silica is not known to be an environmental hazard.

POTENTIAL HEALTH EFFECTS**EYES:** May cause irritation, redness and pain.**SKIN:** No adverse health effects expected.

INHALATION:	Respirable crystalline silica (quartz) can cause chronic silicosis, a fibrosis (scarring of the lungs. Silicosis may be progressive; it may lead to disability and death. Crystalline silica (quartz) inhaled from occupational sources in sufficient concentration is classified as carcinogenic to humans. There is evidence that exposure to respirable crystalline silica may be associated with the increased incidence of several autoimmune disorders: scleroderma, systematic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys.
INGESTION:	No adverse health effects expected.
CHRONIC EXPOSURE:	Inhalation of quartz is classified as a human carcinogen. Chronic exposure can cause silicosis; a form of lung scarring that can cause shortness of breath, reduced lung function, and in severe cases, death.
AGGRAVATION OF PRE-EXISTING CONDITIONS:	Inhalation may increase the progression of tuberculosis; susceptibility is apparently not increased. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.

SECTION III : COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME: Silica, Sand, Silica Sand, Industrial Sand, and Quartz

HAZARDOUS INGREDIENT

NAME	CASE NUMBER	CONCENTRATION
Silica Quartz (SiO ₂)	14808-60-7	90-100%

EXPOSURE LIMITS (RESPIRABLE FRACTION) IN AIR

OSHA & MSHA - PEL:	10mg/m ³ %SiO ₂ + (8-hour TWA)
ACGIH - TLV:	0.05 mg/cubic meter (8-hour TWA)
NIOSH:	0.05 mg/cubic meter (10-hour TWA, 40 hour work week)

Exposure Limits refer to the respirable fraction.

PEL means OSHA Permissible Exposure Limit.

ACGIH means American Conference of Governmental Industry Hygienists.

TLV means Threshold Limit Value.

MSHA means Mine Safety and Health Administration Exposure Limit.

TWA means 8 hour Time Weighted Average

WARNING: AVOID BREATHING DUST FROM THIS PRODUCT BECAUSE IT CONTAINS CRYSTALLINE SILICA. BREATHING CRYSTALLINE SILICA CAN CAUSE THE OCCUPATIONAL LUNG DISEASE SILICOSIS. CRYSTALLINE SILICA MAY CAUSE CANCER AND SCLERODERMA. FOLLOW OSHA HEALTH STANDARDS FOR CRYSTALLINE SILICA.

SECTION IV : FIRST AID MEASURES

EYES CONTACT:	Wash thoroughly with running water. Get medical advice if irritation develops.
SKIN CONTACT:	Wash exposed area with soap and water. Get medical advice if irritation develops.
INHALATION:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
INGESTION:	If large amounts were swallowed, give water to drink and get medical advice.

SECTION V : FIRE FIGHTING MEASURES

FIRE: Not considered to be a fire hazard.	
EXPLOSION:	Not considered to be an explosion hazard.
FIRE EXTINGUISHING MEDIA:	Use any means suitable for extinguishing surrounding fire.
SPECIAL FIRE FIGHTING INSTRUCTIONS:	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION VI : ACCIDENTAL RELEASE MEASURES

Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

Ventilate area of leak or spill. Wear appropriate personal protective equipment (PPE) as specified in Section VIII.

SECTION VII : HANDLING AND STORAGE

Precautions During Handling and Use: do not breathe dust. Use adequate ventilation and dust collection. Keep airborne dust concentrations below PEL. Do not rely on your sight to determine if dust is in the air. Silica may be in the air without a visible dust cloud. If dust cannot be kept below permissible limits, wear a respirator approved for silica dust when using, handling, storing or disposing of this product. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain, clean, and fit test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing that has become dusty. There are no special storage requirements. Train all exposed persons in all sections of this MSDS and the proper handling of silica before they work with this product.

See also control measures in Section VIII

The OSHA Hazard Communication Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21, and state and local worker or community "right to know" laws and regulations should be strictly followed. WARN YOUR EMPLOYEES (AND YOUR CUSTOMERS IN CASE OF RESALE) BY POSTING AND OTHER MEANS OF THE HAZARDS AND THE REQUIRED OSHA PRECAUTIONS. PROVIDE TRAINING FOR YOUR EMPLOYEES ABOUT THE OSHA PRECAUTIONS.

See also American Society for Testing and Materials (ASTM) standard practice E 1132-99a, "Standard Practice for Health Requirements Relating to Occupational Exposure to Respirable Crystalline Silica."

SECTION VIII : EXPOSURE CONTROL/PERSONEL PROTECTION

AIRBORNE EXPOSURE LIMITS

OSHA PERMISSIBLE EXPOSURE LIMIT (PEL)	
TOTAL DUST:	30mg/m3/ (%SiO ₂ +2)
RESPIRABLE FRACTION:	10 mg/m3/ (%SiO ₂ +2)
ACGIH THRESHOLD LIMIT VALUE (TLV): 0.025 mg/m3 (TWA) respirable dust, A2 - Suspected Human Carcinogen.	

VENTILATION SYSTEM:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH APPROVED):

If the exposure limit is exceeded and engineering controls are not feasible, a half-face high efficiency particulate respirator (NIOSH type N100 filter) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece high efficiency particulate respirator (NIOSH type N100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres. Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See 29CFR1910.134 for details.

SKIN PROTECTION:

Wear protective gloves and clean body-covering clothing.

EYE PROTECTION:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

SECTION IX : PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Fine, white to tan multi colored granules.
VAPOR PRESSURE (mm Hg):	10 @ 1732°C (3150°F)
VAPOR DENSITY (AIR=1):	No information found
EVAPORATION RATE (BuAc=1):	Not applicable
SOLUBILITY IN WATER:	Insoluble in water
SPECIFIC GRAVITY:	2.65
PH:	No information found
% VOLATILES BY VOLUME @ 21°C (70°F):	0
MELTING POINT:	1710°C (3110°F)
BOILING POINT:	2230°C (4046°F)
ODOR:	Odorless

SECTION X : STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under ordinary conditions of use and storage.
INCOMPATIBILITY:	Strong alkalis, hydrofluoric acid, powerful oxidizers and fluorine containing compounds

HAZARDOUS DECOMPOSITION:	At higher temperatures, can change crystal structure to form tridymite or cristobalite, which have greater health hazards.
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS TO AVOID:	Dusting and incompatibles.

SECTION XI : TOXICOLOGICAL INFORMATION

SECTION XII : ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:	No information found.
ENVIRONMENTAL TOXICITY:	No information found.

SECTION XIII : DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION XIV : TRANSPORTATION INFORMATION

Not regulated.

SECTION XV : REGULATORY INFORMATION

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

SECTION XVI : OTHER INFORMATION

NFPA RATINGS:	Health: 2 Flammability: 0 Reactivity: 0
LABEL HAZARD WARNING:	WARNING! HARMFUL IF INHALED. OVEREXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE EYE IRRITATION. INHALATION CANCER HAZARD. CONTAINS QUARTZ WHICH CAN CAUSE CANCER. Risk of cancer depends upon duration and level of exposure.
LABEL PRECAUTIONS:	Do not get in eyes, on skin or clothing. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Minimize dust generation and accumulation. Wash thoroughly after handling.

LABEL FIRST AID:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
PRODUCT USE:	Laboratory reagent.
REVISION INFORMATION:	MSDS Section(s) changed since last revision of document include:8
DISCLAIMER: Universal Aggregate Solutions. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. SOUTH CAROLINA MINERALS INC MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER ESPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.	

LEGEND

ACGHI	American Conference of Governmental Industrial Hygienists
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstract Services
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
DOT	Department of Transportation
DSL	Domestic Substance List (Canada)
ECOIN	European Core Inventory
EPA	Environmental Protection Agency
IARC	International Agency for Research on Cancer
LC50	Lethal concentration (50 percent kill)
LD50	Lethal dose (50 percent kill)
N/A	Not Applicable
N/D	Not Determined
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PIN	Product Identification Number
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit
TCLP	Toxic Chemicals Leachate Program
TDG	Transportation of Dangerous Goods
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
atm	atmosphere
cm	centimeter
g, gm	gram
in	inch
kg	kilogram
lb	pound
m	meter
Mg	milligram
ml, ML	milliliter
mm	millimeter
n.s.	not otherwise specified
ppb	parts per billion
ppm	parts per million
psia	pounds per square inch absolute

