

Ultrafine VX Cement**SECTION 1. IDENTIFICATION**

Product Identifier	Ultrafine VX Cement
Other Means of Identification	Cementitious Grout
Recommended Use	Industrial Use Only.
Restrictions on Use	Not applicable.
Manufacturer	US Grout, LLC, 100 Hess Dr, Malad City, ID 83252, USA, 208.766.4777
Supplier/Distributor	Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600
Emergency Phone No.	ChemTrec 800.424.9300
Date of Preparation	March 19, 2018
Date of Last Revision	February 10, 2026

SECTION 2. HAZARD IDENTIFICATION

Classification: Skin Irritation - Category 2; Serious eye damage - Category 1; Skin sensitization - Category 1; Specific target organ toxicity (single exposure) - Category 3 (Respiratory irritation); Carcinogenicity – Category 1A (inhalation, respirable crystalline silica)

Label Elements

Hazard pictogram:



Signal word: Danger

Hazard statements:

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage
- H335 May cause respiratory irritation.
- H350 May cause cancer (inhalation, respirable crystalline silica).

Precautionary Statements

General:

- P102 Keep out of reach of children

Prevention:

- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dusts.
- P264 Wash hands and skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- P301 + P330 + P331 IF SWALLOWED: rinse mouth, do not induce vomiting.
- P302 + P361 + P353 + P363 IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P313 If exposed or concerned: Get medical advice/attention.
 P312 Call a POISON CENTRE or doctor if you feel unwell.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P402 Store in a dry place.
 P501 Dispose of contents and container in accordance with local, regional, national, and international regulations

Storage:
 Disposal:

Other Hazards

Other hazards:

Additional Information on the selection and use of respirators can be found in the NIOSH Respirator Selection Logic (DHHS NIOSH Publication No 2005-100) and the NIOSH Guide to Industrial Respiratory Protection (DHHS NIOSH Publication No 87-116) available at <http://www.cdc.gov/niosh/docs/87-116/>
 This product contains greater than 0.1% crystalline silica. Crystalline silica has been linked to cancer, silicosis, and other lung problems in conditions of prolonged airborne over-exposure. Keep product dry until use. Avoid contact with bleed water from wet product. Clothing saturated with wet product can result in delayed, serious alkali skin burns.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%
Portland cement	65997-15-1	40-50
Silica, crystalline quartz	14808-60-7	0-0.1
Amorphous Aluminum Silicate	1332-09-8	50-60

Occupational exposure limits, if available, are listed in section 8.

SECTION 4. FIRST AID MEASURES

First Aid Measures

General advice: Get medical advice or attention if you feel unwell or are concerned.
 Eye contact: Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Get medical attention immediately.
 Skin contact: Avoid direct contact. Wear chemical protective clothing if necessary. Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.
 Inhalation: Move to fresh air. Get medical advice or attention if you feel unwell or are concerned.
 Ingestion: Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head lower than hips to help prevent aspiration. If victim is fully conscious give one or two cups of water to drink. Get medical attention, if needed.

Most Important Symptoms and Effects, Acute and Delayed

Inhalation: If inhaled: can irritate the nose and throat. In rare cases, may cause asthma or an asthma-like reaction.

Immediate Medical Attention and Special Treatment

Target organs Lungs, respiratory system
 Specific treatments Not applicable
 Medical Conditions Asthma, dermatitis
 Aggravated by Exposure

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing Media

Suitable: Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable: None known.

Specific Hazards Arising from the Product

Flammability classification: Does not burn. Thermal decomposition can lead to release of irritating gases and vapors.

Special Protective Equipment and Precautions for Firefighters

Protective equipment: No special precautions are necessary. Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Non-emergency personnel: Ensure adequate ventilation. Ensure air handling systems are operational. Wear protective eyewear, gloves, and clothing.

Emergency personnel: Ensure adequate ventilation. Ensure air handling systems are operational. Wear protective eyewear, gloves, and clothing.

Environmental precautions: It is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up

Spills: Avoid generating dust. Avoid dry sweeping. If necessary, use a dust suppressant such as water. Do not use compressed air for clean-up. Use water fog or spray curtain to reduce the amount of dust in air. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Store recovered product in suitable containers that are tightly covered.

Other Information

Contact supplier, local fire and emergency services for help.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Avoid breathing in this product. Prevent skin contact. Avoid repeated or prolonged skin contact. Do not swallow. Only use where there is adequate ventilation. Avoid generating dust. Do NOT eat, drink, or store food in work areas. Wash hands thoroughly after handling this product and before eating, using the washroom, or leaving work area.

Conditions for safe storage: Store in an area that is cool and well-ventilated. Keep container tightly sealed. Keep container dry. Store locked up.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters Aluminum Silicate: no occupational exposure limits established by OSHA, ACGIH, or NIOSH
TWA-ACGIH 10mg/m³ (Total Particulate)
TWA-OSHA 10mg/m³ (Total Particulate)
TWA-OSHA 5mg/m³ (Respirable Particulate)
5 mg/m³ NIOSH recommended TWA 10 hour(s) (respirable particulate)
10 mg/m³ NIOSH recommended TWA 10 hour(s) (total particulate)

Appropriate engineering controls: Use local exhaust ventilation if general ventilation is not adequate to control amount in the air. Emergency eyewash fountains and safety showers should be available in the immediate vicinity of use or handling.

Individual Protection Measures

Eyes/face protection: Safety glasses or chemical safety goggles.

Skin/hand protection: Chemical protective clothing e.g. gloves, aprons, boots. Suitable materials are Chemical Resistant Gloves (butyl rubber, nitrile rubber, neoprene rubber).

Body protection: Protective clothing.

Respiratory protection:	Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory equipment must be certified by NIOSH/MSHA. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with N100, R100, or P100 filter(s).
Other protective equipment:	Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Grey powder
Odor:	Not available
Odor threshold:	Not available
pH:	9 – 10
Melting/freezing point:	Not available (melting); Not available (freezing)
Initial boiling point and boiling range:	Not available
Flash point:	Not applicable
Flash point method:	Not applicable
Evaporation rate:	Not available
Flammability (solid, gas):	Will not burn
Upper/lower flammability or explosive limits:	Not applicable (upper); Not applicable (lower)
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	2.87 (water = 1)
Solubility:	0.15 - 1.00 g/100 mL in water; Not available (in other liquids)
Partition coefficient n-octanol/water:	Not available
Auto-ignition temperature:	Not applicable
Decomposition temperature:	Not available
Viscosity:	Not available (kinematic); Not available (dynamic)

SECTION 10. STABILITY AND REACTIVITY

Reactivity:	None known
Chemical stability:	Normally stable
Possibility of hazardous reactions:	None known
Conditions to avoid:	Water, moisture, or humidity. Generation of dust.
Incompatible materials:	None known
Hazardous decomposition products:	None known

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation; eye contact; ingestion.

Acute Toxicity Data

LC50: No information was located. LD50 (oral): No information was located.

LD50 (dermal): No information was located.

Skin corrosion or irritation: May cause moderate or severe irritation based on information for closely related materials. Symptoms include pain, redness, and swelling.

Serious eye damage or irritation: May cause serious eye irritation based on information for closely related materials.

Respiratory sensitization: No information was located for respiratory sensitization.

Skin sensitization: Skin sensitizer.

Germ cell mutation: No information was located.

Carcinogenicity: Portland cement is not classifiable as a human carcinogen. Crystalline silica is considered a hazard by inhalation. IARC has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Excessive exposure to crystalline silica can cause silicosis, a non-cancerous lung disease.

Reproductive toxicity: Development of Offspring: no information was located.
Sexual Function and Fertility: no information was located.
Effects on or via Lactation: no information was located.

Aspiration hazard: No information was located.

Specific Target Organ Toxicity

Single exposure: Inhalation: may cause nose and throat irritation.
Skin Absorption: may cause Symptoms may include redness, rash, swelling and itching.
Ingestion: may cause irritation of the mouth, throat, and stomach.

Repeated exposure: May cause irritation of the respiratory system. May cause respiratory tract injury.
Symptoms may include shortness of breath, rapid breathing, and coughing. The ability to do some physical activities can be reduced. Skin sensitizer

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Data

No information was located.

Persistence and degradability: No information was located.

Bioaccumulative potential: No information was located.

Mobility in soil: No information was located.

Other adverse effects: No information was located.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods: Treat waste in an approved waste disposal facility.

Disposal of empty containers: Emptied containers retain product residue. Disposal of empty containers should comply with the requirements of environmental protection, waste disposal legislation and any federal, state, regional and local authority requirements.

Waste classification: It is the responsibility of the waste generator to determine the proper waste identification and disposal method.

Consult your local or regional authorities.

Refer to section 7 for handling precautions and to section 8 for information on personal protective equipment.

SECTION 14. TRANSPORT INFORMATION

Regulatory Information

	UN No.	Proper Shipping Name	Transport Class	Packing Group
DOT	Not regulated	Not applicable	-	-
TDG	Not regulated	Not applicable	-	-
IMDG	Not regulated	Not applicable	-	-
IATA	Not regulated	Not applicable	-	-

Environmental Hazards Not applicable

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

United States

TSCA 8(B) inventory: All ingredients are listed on TSCA inventory or are exempted.

Massachusetts The following components are listed: cement, portland

New York None of the components are listed

New Jersey The following components are listed: cement, portland

Pennsylvania The following components are listed: cement, portland

California Proposition 65 WARNING: This product contains crystalline silica and chemicals (trace metals) known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires the above warning in the absence of definitive testing to prove the defined risks do not exist.

Canada

CEPA DSL: All the ingredients are on the Domestic Substance List of Environment Canada

SECTION 16. OTHER INFORMATION

NFPA Rating: Health - 1 Flammability - 0 Instability - 0

SDS Prepared By: Avanti International

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Revision Indicators:

Key to Abbreviations: ACGIH® American Conference of Governmental Industrial Hygienists
NFPA National Fire Protection Association
NIOSH National Institute for Occupational Safety and Health
OSHA US Occupational Safety and Health Administration
RTECS® Registry of Toxic Effects of Chemical Substances