# SAFETY DATA SHEET

**EFFECTIVE DATE:** April 22, 2020

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

| | |
|---|---|
| **PRODUCT NAME:** | **Radiant Fusion** |
| **CHEMICAL NAME/SYNONYM:** | **None** |
| **MANUFACTURER:** | **Universal White Cement** |
| **ADDRESS:** | **5610 W. Maryland Ave.<br>Glendale, AZ 85301** |
| **EMERGENCY PHONE:** | **(602) 233-0756** |
| **CHEMTREC PHONE:** | **(800) 424-9300** |
| **RECOMMENDED USE:** | **Cement** |

## SECTION 2: HAZARDS IDENTIFICATION

**HAZARD OVERVIEW:** May cause mechanical irritation to skin, eyes, and respiratory tract. Crystalline silica is present in the mixture and is considered a carcinogen.

**OSHA HAZARD CLASSIFICATION:**

Skin corrosion/irritation – Category 1
Serious eye damage/eye irritation – Category 1
Skin sensitization – Category 1
Carcinogenicity/inhalation – Category 1A
Specific target organ toxicity (single exposure)
[Respiratory tract irritation] – Category 3
STOT-RE, Respiratory Category 1

**OSHA HAZARD PICTOGRAM:**

**SIGNAL WORD:** Danger

**HAZARD STATEMENTS:**

Causes severe skin burns and eye damage.
May cause an allergic reaction.
May cause cancer.
Causes damage to respiratory tract through prolonged or repeated inhalational exposure.

**PRECAUTIONARY STATEMENTS:**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not eat, drink or smoke when using this product.
Do not breathe dust.
Wear protective gloves/ protective clothing/eye protection/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
If on skin: Take off clothing immediately. Wash with plenty of water.
If eye or skin irritation persists: Get medical advice/attention.
If swallowed: Rinse mouth. Do not induce vomiting.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.

Wash thoroughly after handling. Take off contaminated clothing and wash it before reuse. Do not allow contaminated work clothing out of the workplace.

Store locked up in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container to in accordance with local/regional/national/international regulations.

**OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION:** None.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

| INGREDIENT | CAS NO. | % WT |
|---|---|---|
| **White Cement** | **65997-15-1** | **45-54** |
| **Silica** | **14808-60-7** | **35-43** |
| **Glass, oxide, chemicals** | **65997-17-3** | **12.4** |
| **Calcined Kaolin** | **92704-41-1** | **<2** |

Other chemicals present in this mixture are present at <1% or <0.1% per OSHA 2012 HCS.

## SECTION 4: FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water to remove particles for 20 minutes. Seek medical attention.

**SKIN:** Seek medical attention immediately. Immediately wash thoroughly with lukewarm, gently flowing water and non-abrasive pH natural soap. Burns should be treated as caustic burns. White cement causes skin burns with little warning. Discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain or the severity of the burn until hours after the exposure. Remove contaminated clothes and launder before reuse.

**INGESTION:** Rinse mouth. Do not induce vomiting. Seek medical attention immediately.

**INHALATION:** Dust may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur following unprotected exposure in excess of suggested limits. Remove to fresh air. Seek medical attention if any symptoms appear.

## SECTION 5: FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use dry chemical extinguishing media or water. Do not scatter spilled material with high pressure water streams.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear respiratory protective device.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**GENERAL:** Do not dry sweep. Transfer collected material to a container, being careful to minimize creation of dust. Care should be taken to keep spilled products out of sewers, streams, and water systems.

**LAND SPILL:** Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid contamination of water bodies during clean up and disposal.

**WATER SPILL:** No specific instruction. Care should be taken to keep spilled products out of sewers, streams, and water systems.

## SECTION 7: HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Good housekeeping procedures should be followed to minimize dust generation and accumulation. Avoid spills. Do not eat, drink, or smoke in work areas. Wash hands and exposed skin after use. Remove contaminated clothing and protective equipment before entering eating areas.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Keep dry until use. Atmospheric temperatures and pressures do not affect the shelf life of this product. Store out of direct heat and light. Do no store near potential spark or flame. ncompatible with strong oxidizing agents.

**Storage temperature:** Ambient
**Storage pressure:** Atmospheric
**Special sensitivity:** None

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

| INGREDIENT | CAS NO. | OSHA | ACGIH |
|---|---|---|---|
| **White cement** | **65997-15-1** | 15 mg/m$^3$ total dust and 5 mg/m$^3$ respirable dust | 10 mg/m$^3$ total dust and 3 mg/m$^3$ respirable dust |
| **#12 Silica Sand** | **14808-60-7** | 50 µg/m$^3$ [25 µg/m$^3$ Action Level] | 0.025 mg/m$^3$ (respirable particulate matter) |
| **Glass, oxide, chemicals** | **65997-17-3** | 15 mg/m$^3$ as Fibrous Glass | 1 fiber/cm$^3$ |
| **Attapulgite** | **12174-11-7** | 0.1 mg/m$^3$ respirable dust | 1 mg/m$^3$ respirable |

**ENGINEERING CONTROLS AND VENTILATION:** Use local exhaust ventilation to keep airborne concentrations of dust below permissible exposure limits.

**RESPIRATORY PROTECTION:** If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted vapor/particulate respirator approved by NIOSH for protection.

**EYE PROTECTION:** Wear eye protection (e.g., safety goggles) to reduce the potential for eye contact.

**SKIN PROTECTION:** Prevent prolonged or repeated contact by using rubber gloves, sleeves, aprons, and appropriate protective clothing.

**SECTION 8 NOTES:** PEL: Permissible Exposure Limit, TLV: Threshold Limit Value, TWA: Time Weighted Average

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** White or colored powder

**ODOR:** Odorless

**ODOR THRESHOLD:** Not applicable

**pH AT AS SUPPLIED:** >11.5 at 25•C

**MELTING POINT/ FREEZING POINT:** Not applicable

**BOILING POINT AND BOILING RANGE:** Not applicable

**FLASH POINT**: Not applicable

**EVAPORATION RATE**: Not applicable

**FLAMMABILITY**: Non-flammable

**UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS**: Not applicable

**VAPOR PRESSURE**: Not applicable

**VAPOR DENSITY**: Not applicable

**RELATIVE DENSITY: 2.3-3.1 g/cm$^3$**

**SOLUBILITY IN WATER:** Not soluble

**SPECIFIC GRAVITY:** Not applicable

**PARTITION COEFFICIENT; n-octanol/water:** Unknown

**AUTO-IGNITION TEMPERATURE**: Not applicable

**DECOMPOSITION TEMPERATURE**: Not applicable

**VISCOSITY**: Not applicable: solid substance

**EXPLOSIVE PROPERTIES**: Not explosive

**OXIDISING PROPERTIES**: Not oxidizing

**MOLECULAR WEIGHT:** Mixture

**VOC CONTENT:** No VOCs

## SECTION 10: STABILITY AND REACTIVITY

**REACTIVITY:** None known.

**STABILITY:** The product is stable and does not change under normal storage conditions.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** None known.

## SECTION 11: TOXICOLOGICAL INFORMATION

**ROUTES OF EXPOSURE:** Inhalation of dust and dermal exposure are the most significant routes of exposure in occupational and other settings. Incidental ingestion of dust may occur. Personal protective equipment and good hygiene can reduce these exposures significantly.

**SYMPTOMS RELATED TO THE PHYSICAL, AND CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:** Exposure can irritate skin, eyes, throat, nose, and respiratory tract. Hypersensitive individuals may develop an allergic dermatitis.

**DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:** Hypersensitive individuals may develop allergic dermatitis. Quartz (crystalline silica) in excess of 2% may pose a risk for silicosis, a lung disease. Prolonged and repeated inhalation of respirable crystalline silica-containing dust in excess of appropriate exposure limits has been associated with silicosis. Symptoms of silicosis may include, but are not limited to, the following: shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure. Smoking may increase the risk of developing lung disorders, including emphysema and lung cancer. Not all individuals with silicosis will exhibit symptoms (signs) of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposure has ceased. Persons with silicosis have an increased risk of pulmonary tuberculosis infection. Several studies of persons with silicosis also indicate an increased risk of developing lung cancer, a risk that increases with the duration of exposure. Some of these studies of silicosis do not account for lung cancer confounders, especially smoking.

**ACUTE HEALTH HAZARDS**

**White Cement:**

- **Oral $LD_{50}$ (rat):** >5,000 mg/kg of body weight
- **Dermal $LD_{50}$ (rabbit):** >2,000 mg/kg of body weight
- **Inhalation $LC_{50}$ (rat):** >5.8 mg/L
- **Dermal irritation/corrosivity (rabbit):** Irritating (Skin Irritation, Category 1)
- **Eye irritation (rabbit):** Irreversible effects on the eye (Eye Damage, Category 1)

**Silica:**

- **Oral $LD_{50}$ (rat):** >22,500 mg/kg
- **Dermal $LD_{50}$:** No information found
- **Inhalation $LC_{50}$:** No information found
- **Dermal irritation/corrosivity:** No information found
- **Eye irritation:** No information found

**Glass, oxide, chemicals:**

- **Oral $LD_{50}$:** No information found
- **Percutaneous $LD_{50}$:** No information found
- **Inhalation $LC_{50}$:** No information found
- **Dermal irritation/corrosivity:** No information found
- **Eye irritation:** No information found

**Attapulgite:**

- **Oral $LD_{50}$:** No information found
- **Dermal $LD_{50}$:** No information found
- **Inhalation $LC_{50}$:** No information found
- **Dermal irritation/corrosivity:** No information found
- **Eye irritation:** No information found

**CHRONIC HEALTH HAZARDS:** Acti-Plex may cause damage to respiratory system through prolonged or repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. No other chronic effects were identified due to the other ingredients or the mixture.

**REPRODUCTIVE EFFECTS:** No reproductive effects from White Cement, #12 Silica Sand, Cobalt Blue Glass, and Acti-Plex were found.

**CARCINOGENICITY:** White Cement is classified as a group A4 - Not Classifiable as a Human Carcinogen by ACGIH, is listed by OSHA, and is not listed as a known or suspected carcinogen by NTP or IARC. Radiant Glass, as Flat-glass and specialty glass (manufacture of), is classified as Group 3 - Not Classifiable as to Carcinogenicity in Humans by IARC, as a group A4 - Not Classifiable as a Human Carcinogen by ACGIH, is listed by OSHA, and is not listed as a known or suspected carcinogen by NTP. Attapulgite has been categorized under Group 3 - Not Classifiable as to Carcinogenicity in Humans by IARC and is listed by OSHA. This product also contains quartz (silica) which is a human carcinogen by OSHA, ACGIH, and IARC. Respirable crystalline silica is classified as carcinogenic (Group 1) by IARC. NTP lists respirable crystalline silica as a “known human carcinogen.” ACGIH lists respirable crystalline silica as a suspected human carcinogen (A2). These classifications are based on sufficient evidence of carcinogenicity in certain experimental animals and on selected epidemiological studies of workers exposed to crystalline silica. (Carcinogenicity, Category 1A).

## SECTION 12: ECOLOGICAL INFORMATION

**ECOTOXICITY**: Silica sand is not known to be ecotoxic.
Radiant Glass: $LC_{50}$ = 1 g/L (freshwater fish) for 4 days.
No information found for the other chemicals.

**PHYTOTOXICITY:** No information found

**PERSISTENCE AND DEGRADABILITY:** Acti-Plex and silica sand are not readily biodegradable. No information found for the other chemicals.

**BIOACCUMMULATIVE POTENTIAL:** Silica sand is not bioaccumulative. Radiant Glass has low bioaccumulation potential. No information found for the other chemicals.

**MOBILITY IN SOIL:** Acti-Plex is insoluble in water, so negligible mobility in soil. Silica sand is not mobile in soil. No information found for the other chemicals.

**OTHER EFFECTS:** None

## SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material.

**RCRA HAZARD CLASS:** The product is not listed under any section of the Federal Resource Conservation and Recovery Act (RCRA).

**CALIFORNIA HAZARDOUS WASTE DESIGNATION** California identifies substances with acute oral, acute dermal, or acute inhalation $LD_{50}$s less than 2,500, 4,300, or 10,000 mg/kg, respectively as “hazardous wastes." This product is therefore NOT a "hazardous waste" if spilled in California.

## SECTION 14: TRANSPORT INFORMATION

**U.S. DEPARTMENT OF TRANSPORTATION:** The product is not a US Department of Transportation (DOT) Hazardous Material or Hazardous Substance.

**OTHER AGENCIES:** The product has no UN Number and is not regulated under international rail, highway, water, or air transport regulations.

## SECTION 15: REGULATORY INFORMATION

**TSCA NO.**: All components of this product are listed on the TSCA inventory.

**RCRA**: Not listed as a hazardous waste under any sections of the Resource Conservation and Recovery Act or regulations (40) CFR 261 et seq.).

**SUPERFUND: CERCLA/SARA**. Not listed under CERCLA (the Comprehensive Environmental Response Compensation and Liability Act) or its 1986 amendments, SARA, (the Superfund Amendments and Reauthorization Act), including substances listed under Section 313 of SARA, Toxic Chemicals, 42 USC 11023, 40 CFR 372.65; Section 302 of SARA, Extremely Hazardous Substances, 42 USC 11002, 40 CFR 355; or the CERCLA Hazardous Substances list, 42 USC 9604, 40 CFR 302.

**SAFE DRINKING WATER ACT**: Not regulated under the SDWA, 42 USC 300g-1, 40 CFR 141 et seq.
Clean Water Act (Federal Water Pollution Control Act): 33 USC 1251 et seq.

a.) Not a discharge covered by any water quality criteria of Section 304 of the CWA, 33USC 1314
b.) It is not on the Section 307 List of Priority Pollutants, 33 USC 1317, 40 CFR 129
c.) It is not on the Section 311 List of Hazardous Substances, 33 USC 1321, 40 CFR 116.

**OSHA/CAL OSHA**: This SDS document meets the requirements of both OSHA (29 CFR 1910.1200) and Cal OSHA (Title 8 CCR 5194(g)) hazard communication standards. Refer to Exposure Control/Personal Protection for regulatory exposure limits.

**CALIFORNIA PROPOSITION 65**: The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm.

| Chemical Name | CAS Number |
|---|---|
| SILICA, crystalline (airborne particles of respirable size) | 14808-60-7 |

## SECTION 16: OTHER INFORMATION

**OTHER INFORMATION:** This SDS was finalized on April 22, 2020 and is compliant with OSHA HCS/HazCom 2012 Final Rule.

**DISCLAIMER:** Information presented herein has been compiled from sources considered dependable and is accurate and reliable to the best of our knowledge and belief, but it is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any law or regulation. It is the user's responsibility to determine the suitability of any material for a specific purpose and adopt necessary safety precautions. We make no warranty as to results to be obtained in using any material and, since conditions or use are not under our control, we must necessarily disclaim all liability with respect to use of any material supplied by us.