



85 JETSON LANE, CENTRAL ISLIP, NY 11722  
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*Advanced Surfacing Products & Technology*

MATERIAL SAFETY DATA SHEET: # 23 WHITE ROUGE

**SECTION 1: CHEMICAL PRODUCT & COMPANY INFORMATION**

APPLICABLE PART #: **BF0006** IDENTITY: **#23 White Rouge**

SUPPLIER: **Universal Photonics, Inc.** FOR INFORMATION CALL  
**85 Jetson Lane** CUSTOMER SERVICE **(516) 935-4000**  
**Central Islip, NY 11722** DATE PREPARED: **January 3, 2017**

EMERGENCY TELEPHONE NUMBER: **1.866.519.4752** **3-E COMPANY - ACCT # 3665**

**SECTION 2: COMPOSITION INFORMATION**

COMPONENT	CHEMICAL FORMULA	CAS#	WT %	OSHA PEL	ACGIH TLV
<b>Crystalline Silica (quartz)</b>	<b>SiO<sub>2</sub></b>	<b>14808-60-7</b>	<b>99-99.9</b>	<b>10 % SiO<sub>2</sub> +2</b>	<b>.025</b>
<b>Aluminum Oxide</b>	<b>Al<sub>2</sub>O<sub>3</sub></b>	<b>1344-28-1</b>	<b>&lt;0.8</b>	<b>None</b>	<b>None</b>
<b>Iron Oxide</b>	<b>Fe<sub>2</sub>O<sub>3</sub></b>	<b>1309-37-1</b>	<b>&lt;0.1</b>	<b>None</b>	<b>None</b>
<b>Titanium Oxide</b>	<b>TiO<sub>2</sub></b>	<b>13463-67-7</b>	<b>&lt;0.1</b>	<b>None</b>	<b>None</b>

**SECTION 3: HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW: **#23 White rouge is not flammable, combustible or explosive. It does not cause burns or severe skin or eye irritation. A single exposure will not result in serious adverse health effects. It's not known to be an environmental hazard and is incompatible with hydrofluoric acid, fluorine, chlorine trifluoride or oxygen difluoride.**

OSHA REGULATORY STATUS: **This material is considered hazardous under the OSHA Hazard Communications Standard (29 CFR 1910.1200).**

POTENTIAL HEALTH EFFECTS

INHALATION:

SILICOSIS: **Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death.**

LUNG CANCER: **Crystalline silica (quartz) inhaled from occupational sources is classified as carcinogenic to humans.**

TUBERCULOSIS: **Silicosis increases the risk of tuberculosis.**

AUTOIMMUNE AND CHRONIC KIDNEY DISEASES: **Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica.**



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NON-MALIGNANT RESPIRATORY  
DISEASES (OTHER THAN  
SILICOSIS):

**Some studies show an increased incidence in chronic bronchitis and emphysema in workers exposed to respirable crystalline silica.**

EYE CONTACT:

**Crystalline silica (quartz) may cause abrasion of the cornea.**

SKIN CONTACT:

**Not applicable.**

INGESTION:

**Not applicable.**

**The adverse health effects -- silicosis, lung cancer, autoimmune and chronic kidney diseases, tuberculosis, and non-malignant respiratory diseases-- are chronic effects.**

SIGNS AND SYMPTOMS OF EXPOSURE:

**Generally, there are no signs or symptoms of exposure to crystalline silica (quartz).**

MEDICAL CONDITIONS GENERALLY AGGRAVATED  
BY EXPOSURE:

**The condition of individuals with lung disease (e.g., bronchitis, emphysema, chronic obstructive pulmonary disease) can be aggravated by exposure.**

### SECTION 4: FIRST AID MEASURES

EYES: **Immediately flush eyes with plenty of water for at least 15 minutes, get medical attention if irritation persists.**

SKIN: **N/A**

INHALATION: **No specific first-aid is necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures. If there is a gross inhalation of crystalline silica (quartz), remove the person immediately to fresh air, give artificial respiration as needed, seek medical attention as needed.**

INGESTION: **N/A**

### SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: **None**

AUTO-IGNITION TEMPERATURE: **N/A**

EXTINGUISHING MEDIA: **Use any means suitable for extinguishing surrounding fire.**

HAZARDOUS COMBUSTION PRODUCTS: **None**

REQUIRED SPECIAL PROTECTIVE EQUIPMENT FOR  
FIREFIGHTERS: **None**

### SECTION 6: ACCIDENTAL RELEASE MEASURES



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METHODS FOR CLEANING SMALL/LARGE SPILL: **Use dustless methods and place into closable container for disposal. Do not dry sweep.**

### SECTION 7: HANDLING & STORAGE

HANDLING & STORAGE: **Do not breathe dust. Use adequate ventilation and dust collection. Keep airborne dust concentrations below permissible exposure limit ("PEL"). Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud. If crystalline silica dust cannot be kept below permissible limits, wear a respirator approved for silica dust when using, handling, storing or disposing of this product or bag. See Section 8 for further information on respirators. 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.**

### SECTION 8: PERSONAL PROTECTION AND EXPOSURE CONTROLS

VENTILATION: **Use adequate ventilation in order to meet exposure limits listed in section 2.**

RESPIRATORY PROTECTION: **NOISH approved dust respirator if overexposure potential exists.**

SKIN PROTECTION: **Leather or rubber gloves.**

EYE PROTECTION: **Use safety glasses or chemical safety goggles and/or full-face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.**

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:	<b>4046°F/2230 °C</b>	MELTING POINT:	<b>3110°F/1710 °C</b>
SPECIFIC GRAVITY	<b>2.65</b>	VAPOR PRESSURE:	<b>N/A</b>
SOLUBILITY:	<b>N/A</b>	PH IN WATER:	<b>N/D</b>
SOLUBILITY IN WATER & ORGANIC SOLVENTS	<b>Insoluble</b>	APPEARANCE AND ODOR	<b>White/Tan Powder</b>

### SECTION 10: STABILITY & REACTIVITY

STABILITY: **Stable under normal conditions of use and storage**

CONDITIONS TO AVOID: **Incompatibilities.**

INCOMPATIBILITY: **Oxidizing agents: fluorine, chlorine trifluoride and oxygen difluoride**

HAZARDOUS DECOMPOSITION PRODUCTS: **Silica will dissolve in hydrofluoric acid and produce a corrosive gas – silicon tetrafluoride.**



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HAZARDOUS POLYMERIZATION: **None.**

### SECTION 11: TOXICOLOGICAL INFORMATION

The method of exposure to crystalline silica that can lead to the adverse health effects described below is inhalation.

**SILICOSIS:** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute.

*Chronic or Ordinary Silicosis (often referred to as Simple Silicosis)* is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis.

Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability.

Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Although there may be no symptoms associated with complicated silicosis or PMF, the symptoms, if present, are shortness of breath, wheezing, cough and sputum production. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pulmonale).

*Accelerated Silicosis* can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier and progression is more rapid.

*Acute Silicosis* can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis is fatal.

**CANCER: IARC -** The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz and cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997).

**NTP -** The National Toxicology Program's Eleventh Annual Report on Carcinogens classifies "silica, crystalline (respirable size)" as a known human carcinogen.

**OSHA -** Crystalline silica (quartz) is not regulated by the U. S. Occupational Safety and Health Administration as a carcinogen.

**AUTOIMMUNE DISEASES:** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers. For a review of the subject, the following may be consulted: "Occupational Exposure to Crystalline Silica and Autoimmune Disease", Environmental Health Perspectives,



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Volume 107, Supplement 5, pp. 793-802 (1999); "Occupational Scleroderma", Current Opinion in Rheumatology, Volume 11, pp. 490-494 (1999).

**TUBERCULOSIS:** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis. The following may be consulted for further information: Occupational Lung Disorders, Third Edition, Chapter 12, entitled "Silicosis and Related Diseases", Parkes, W. Raymond (1994); "Risk of pulmonary tuberculosis relative to silicosis and exposure to silica dust in South African gold miners," Occup Environ Med., Volume 55, pp.496-502 (1998).

**KIDNEY DISEASE:** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers. For additional information on the subject, the following may be consulted: "Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000).

**NON-MALIGNANT RESPIRATORY DISEASES:** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers. It is unclear whether the observed associations exist only with underlying silicosis, only among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in the dust).

### SECTION 12: ECOLOGICAL INFORMATION

No known effects other than those associated with suspended inert solids in water.

### SECTION 13: DISPOSAL INFORMATION

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Recycle, reclaim and dispose of contents and container in accordance to state and local and federal regulations.

### SECTION 14: TRANSPORTATION INFORMATION

Not hazardous.

### SECTION 15: REGULATORY INFORMATION

#### UNITED STATES (FEDERAL AND STATE)

TSCA No.:	Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7.
RCRA:	Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.
CERCLA:	Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.
EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT (SARA TITLE III):	Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.

