Safety Data Sheet

Section 1 - Identification

Product Name UGF21 Sunflower Yellow

Date 08/06/2019
Common Names Pottery Glaze

Company Clay Art Center Inc

2636 Pioneer Way East Tacoma Wa 98404

Emergency Number 911

Product Use Pottery and Ceramics

Restrictions on Use None applicable

Section 2 - Hazardaus Identification

Contains Crystalline Silica > 1% Respirable

GHS label elements / Hazard pictograms



OSHA / HCS status In the liquid form this material is not considered hazardous.

If exposed to airborne dust or mist this material is considered hazardous by OSHA Hazard Communication Standard (29 CFR 1910. 1200)

Classification of the substance or mixture

OSHA - Carcinogenicity (Inhalation) - Category 1A

Specific organ toxicity (Repeated Exposure) (Resipratory tract through

inhalation) - Category 1

Signal Word Danger

Hazard Statement (H350) Cancer Hazard. Contains quartz (crystalline silica) which may cause

cancer. Risk of cancer depends upon duration and level of exposure to the dust

Not an acute hazard.

(H332) Prolonged inhalation of dust may cause lung injury. Inhalation of high concentrations of dust may cause mechanical irritation and discomfort of the

respiratory tract. Repeated exposure may have chronic effects.

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye

damage.

(H316 + H320 + H335) Can cause skin, respiratory, and eye irratation.

Precautionary (P261) Avoid breathing dust

Statements (P280) Wear protective gloves, eye, and respiratory protection.

Section 3 - Composition / Information on Ingredients

Substances / Mixtures

Mixture - A trade secret claim is made for this item

| Component | CAS# | Approx % by Wt. |
|--------------------------------------|-------------|-----------------|
| Kaolin | 1332-58-7 | 10%-15% |
| Quartz (Crystalline Silica) | 14808-60-7 | 5%-10% |
| Titanium Dioxide | 13463-67-7 | <2% |
| Ferro Frit* | 65997-18-4 | 20%-30% |
| Feldspar | 68476-25-5 | 20%-30% |
| Zirconium Silicate | 14940-68-2 | 10%-20% |
| Acti-Gel 208 | 12174-11-7 | <2% |
| Bentonite | 1302-78-9 | <5% |
| Cadmium pigment-encapsulated | 102184-95-2 | <5% |
| Zirconium Iron Pink Zircon | 68186-89-0 | <2% |
| Zirconium Praseodymium Yellow Zircon | 68187-15-5 | 5%-10% |

^{*}Frit, with CAS # [65997-18-4], is a mixture of inorganic chemical substances produced by rapidly quenching a molten, complex combination of materials, confining the chemical substances thus manufactured as non-migratory components of glassy solid flakes or granules. These components are present as part of the Frit.

Section 4 - First Aid Measures

| Eye Contact | If eye contact occures, rinse immediately with plenty of water. If irritation persists, seek medical attention. |
|--------------|---|
| Skin Contact | If irritation occurs, wash thoroughly with water. If it persists, seek medical attention. |
| Inhalation | Move victim to fresh air in well ventilated area. If coughing or irritation persist, seek medical attention. |
| Ingestion | Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues. |

Symptoms and Effects, both Acute and Delayed

| Eye Contact | Prolonged contact with large amounts of dust may cause mechanical irritation. |
|------------------|---|
| Skin Contact | Prolonged contact with large amounts of dust may cause mechanical irritation. |
| Inhalation | Inhalation of high concentrations of dry dust may cause mechanical irritation and discomfort. Long term exposure may cause chronic effects (see section 11) |
| Ingestion | Large quantities ingested may cause gastrointestinal irritation. |
| Chronic Symptoms | Repeated or prolonged exposure to respirable crystalline silica dust may cause lung damage in the form of silicosis. Symptoms will include shortness of breath, fever, fatigue, loss of appetite, chest pain, dry non-productive cough. |

General Fire Hazards Glaze mixture is not flammable and does not support fire. The plastic bottle

containing the mixture are flammable.

Extinguishing Media Use appropiate extinguishing media for surrounding fire.

Chemical Hazards from Fire

Glaze mixture does not contain hazardous decomposition products.

Protective Actions and Equipment for Fire-fighters

Glaze mixture and packaging can become slippery when wet. Fire-Fighters

should wear appropiate protective equipment.

Clean - up Methods Sponge or mop spill using plenty of water.

and Personal

Personal Precautions Wear appropriate protective equipment and clothing during clean-up. When dry sweeping

use NIOSH approved respirators when dust levels exceed exposure limits.

Protection Equipment

Enviromental Precautions

None

Emergency Procedures and Methods of Containment

There is no emergency procedures required for this mixture. Place dry powder in

a sealed container for proper disposal.

Precations for Safe Handling

Use proper lifting techniques to avoid injury.

Recommendations on the Conditions for Safe Storage

Store in a clean dry location.

Airborne Exposure Limits

| Hazardous Ingrediant | Wt. % Aprox. | CAS# | OSHA PEL* / ACGIH TLV |
|--------------------------------------|--------------|-------------|--|
| Kaolin | 10%-15% | 1332-58-7 | 5mg/m3/2mg/m3 respirable 15mg/m3 total dust |
| Quartz (Crystalline Silica) | 5%-10% | 14808-60-7 | 0.1mg/m3 / 0.025 mg/m3respirable |
| Titanium Dioxide | <2% | 13463-67-7 | 15mg/m3 / 3mg/m3 respirable |
| Ferro Frit* | 20%-30% | 65997-18-4 | 5mg/m3 / 5mg/m3 |
| Feldspar | 20%-30% | 68476-25-5 | 5mg/m3 / 2mg/m3 respirable |
| Zirconium Silicate | 10%-20% | 14940-68-2 | 5mg/m3 / 0.1mg/m3 |
| Acti-Gel 208 | <2% | 12174-11-7 | 0.025mg/m3 respirable |
| Bentonite | <2% | 1302-78-9 | 5mg/m3 / 3mg/m3 respirable |
| Cadmium pigment-encapsulated | <5% | 102184-95-2 | 10mg/m3 (total) 15 mg/m3 (total) |
| Zirconium Iron Pink Zircon | <2% | 68186-89-0 | 15mg/m3 (total)/10mg/m3(total) |
| Zirconium Praseodymium Yellow Zircon | n 5%-10% | 68187-15-5 | 15mg/m3 (total)/10mg/m3(total) |

^{*}Frit, with CAS # [65997-18-4], is a mixture of inorganic chemical substances produced by rapidly quenching a molten, complex combination of materials, confining the chemical substances thus manufactured as non-migratory components of glassy solid flakes or granules. These components are present as part of the Frit.

Engineering Measures Provide sufficient ventilation for operations causing dust formation.

Observe occupational exposure limits and minimize the risk of exposure.

Personal Protective Equipment (PPE)

Respiratory If engineering controls do not maintain airborne concentrations below

recommended exposure limits an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to

control exposure.

Eyes Wear approved safety googles.

Skin and Body It is a good industrial hygiene practice to minimize skin contact. For

prolonged contact use suitable protective gloves.

Section 9-- Physical and Chemical Properties

| Appearance | Dry Powder or Liquid | Evaporation Rate | Not Applicable |
|--------------------|----------------------|----------------------------------|----------------|
| Color | Yellow | Solubility in Water at 100c None | |
| Physical State | Dry Powder or Liquid | Viscosity | Not Applicable |
| ph | 6-8 | Flashpoint | Not Applicable |
| Odor | low to none | Boiling Point | Not Applicable |
| Odor Threshold | Not Applicable | Flammability | Not Applicable |
| Melting Point | Not Applicable | Vapor Pressure(mm HG) | Not Applicable |
| Freezing Point | Not Applicable | Vapor Density | Not Applicable |
| Relative Density / | | Partrician coefficent | Not Applicable |
| Specific Gravity | 1.76 (H2O=1) | Auto Ignition Temp. | Not Applicable |

Section 10 - Stability and Reactivity

Reactivity No dangerous reactions are known under normal conditions of use.

Chemical Stability Material is stable under normal conditions.

Possibility of Hazardous

Reactions

Hazardous polymerization does not occur.

Conditions to Avoid Airborne dust

Incompatible Materials None

Hazardous Decomposition

Products

None

Section 11-- Toxicological Information

Primary Route of Exposure Skin, Eye Contact, Inhalation and Ingestion.

Specific Organ Toxicity

Single Exposure

Target organs include Skin and respiratory system

Specific Organ Toxicity Repeated Exposure Cause damage to eyes, skin and respiratory system

through prolonged or repeated exposure.

Acute Short Term Exposure Effects

May cause eye irritation, skin irritation and respiratory tract irritation Inhalation of high concentrations of dry powder may cause mechanical irritation and discomfort. Long term exposure may cause chronic effects.

Chronic Long Term Exposure Effects

Silica has been classified by OSHA as a human lung carcinogen. Repeated or prolonged exposure of respirable crysalline silica dust may cause lung damage in the form of silicosis. Effects of silicosis include bronchitis/chronic obstructive pulmonary disorder, increased susceptibility to tuberculisis, sclerderma (a disease affecting skin, blood vessels, joints and skeletal muscles),and possible renal disease. Acute silicosis can be fatal.

Related Symptoms

Symptoms will include shortness of breath, fever, fatigue, loss of appetite, chest

pain, dry non-productive cough.

Medical Conditions
Aggravated by Exposure

Individuals with pre-existing allergies, eye disorders, skin disorders, respiratory disorders may have increased susceptibility to the effects of exposure.

Section 12-- Ecological Information (non-mandatory)

Biochemical Oxygen Demand (BODS)
Chemical Oxygen Demand (COD)
Products of Biodegradition
Toxicity of the Products of Biodegradation
Bioaccumulation Potential
Potential to MKove from Soil to Groundwater
None Known

Personal Protection Refer to section 8 for proper PPE when disposing of waste material.

Appropriate Disposal Containers Standard waste disposal containers - no special requirements.

Appropriate Disposal Methods Disposal of this product should comply with the requirements of

enviromental protection and waste disposal legislation and any

regional or local authority requirements.

Physical and Chemical Properties

that May Affect Disposal

Dry dust should be placed in a sealed container or in a manner that

reduces or eliminates the release of the product.

Swage Disposal No precautions

Special Precautions for Landfills

or Incineration Activities

There are no special precautions for disposal in a landfill. This product

is non-combustible and is not suitable for incineration.

| Regulatory | UN Number | UN Proper | Transport | Packing | Bulk Transport | Special |
|---|---|------------------|------------------|------------------|------------------|------------------|
| Information | | Shipping Name | Hazard Class | Group Number | Guidance | Precautions |
| DOT Classification TDG Classification ADR/RID Class IMDG Class IATA-DGR Class | Not Regulated Not Regulated Not Regulated Not Regulated Not Regulated | - - - - | - - - - | - - - - | - - - - | - - - - |

TSCA - Toxic Substance Quartz and other chemicals are listed in the TSCA Substance Inventory.

California Prop. 65 Warning

This product contains a chemical known to the State Of California to cause cancer. (Prop 65 - California Health and Safety Code Section 2549 Et Seq)

SARA / Title III (Emergency Planning and **Community Right to Know Act**

This mixture contains no substance at or above the reporting threshold under section 313, based on available data

Definitions

ACGIH American Conference of Governmental Industrial Hygienist

CAS Chemical Abstract Service

CAL-OSHA California Cccupational Safety and Health Administration

IARC International Agency for Reaserch on Cancer **OSHA** Occupational Safety and Health Administration

Mine Safety and Health Administration **MSHA**

National Institute of Occupational Safety and Health **NIOSH**

National Toxicology Program NTP

Hazardous Communication Standard HCS **OSHA PEL** OSHA Permissible Exposure Limit

Short Term Exposure Limit STEL TLV Theshold Limit Value TWA Time Weighted Average

Section 16 -- Other Information (non-mandatory) continued

Three types of TLVS for chemical substances as defined by the ACGIH are:

TLV-TWA Time weighted average - average exposure on the basis of an 8 h/day, 40h/week

work schedule.

TLV - STEL Short - term exposure limit - spot exposure for a duration of 15 minutes, that can

not be repeated more than 4 times per day, with at least 60 minutes between

exposure periods.

TLV-C Ceiling limit - absolute exposure limit that should not be exceeded at any time.

This SDS is in compliance with The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) and is subject to revision at any time without notice. Its current revision date is: 11/25/2016

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