

CUSTOMER - LAGUNA CLAY CO. (WESTWOOD CER)

Page: 1

MATERIAL SAFETY DATA SHEET

Prepared: 11/08/96

Cerdec Corporation
Drakenfeld Products
P.O. Box 519
Washington PA 15301
Information Phone: 412-223-5900

EMERGENCY PHONE :

CHEMTREC (800) 424-9300

This number is to be used only
in the event of chemical emer-
gencies involving a spill, leak,
fire, exposure or accident
involving chemicals

Prepared By : Lucy Sten
Product Safety Specialist

SECTION I - IDENTITY INFORMATION

TRADE NAME : 239 416 YELLOW

CAS NUMBER : Mixture

PRODUCT CODE : 50J883416400

FAMILY/CHEMICAL NAME:

Pigment and Silica Mixture.

PRODUCT TYPE:

Clayware Stains.

HAZARD STATEMENT:

This Material Safety Data Sheet (MSDS) has been prepared in
compliance with the Federal OSHA Hazard Communication Standard
29 CFR 1910.1200.

This product is considered to be a hazardous substance under
that standard.

The key Immediate Hazards are:

- Skin, eye and respiratory irritant.

SECTION II - HAZARDOUS INGREDIENTS

This product contains either pigment(s) that belong to the mixed
metal oxide pigment class and/or frit which is an amorphous
glassy material. These ingredients have been chemically reacted
at high temperatures. They consist of metal atoms and oxygen
atoms arranged in unique structures; the toxicological
properties have not been thoroughly investigated. A small

MATERIAL SAFETY DATA SHEET
239 416 YELLOW (50J883416400)

SECTION II - HAZARDOUS INGREDIENTS (cont.)

HAZARD STATEMENT:

percentage of the starting materials may remain in this product and are considered hazardous under OSHA.

The pigment and/or frit ingredient(s) do not have exposure limit values. Exposure limit values for the components are listed beneath each ingredient as a guideline for safe use of these products.

Ingredients	CAS NUMBER	ACGIH - TLV OSHA - PEL			
CADMIUM YELLOW ZIRC PIGMENT	72968-34-4*				
Carcinogenicity:					
This product has not been reviewed for carcinogenicity by IARC, NTP or OSHA; however, various forms of cadmium are considered to be carcinogenic by IARC (Group 2A), NTP, OSHA and ACGIH (A-2).					
ZIRCONIUM COMPOUND					
Zr		TWA	5.0 mg/M3	5.0	mg/M3
		STEL	10.0 mg/M3	10.0	mg/M3
CRYSTALLINE SILICA					
Dust		RESP	0.1 mg/M3	0.1	mg/M3
CADMIUM COMPOUND					
Cd Dust		TWA	0.01 mg/M3	0.005	mg/M3
		RESP	0.002 mg/M3		
Cd Fume		TWA	0.01 mg/M3	0.005	mg/M3
		STEL	0.05 mg/M3		
		RESP	0.002 mg/M3		
CRYSTALLINE SILICA	14808-60-7				
Carcinogenicity:					
This product is considered to be carcinogenic by IARC (Group 2A).					
CRYSTALLINE SILICA					
Dust		RESP	0.1 mg/M3	0.1	mg/M3

MATERIAL SAFETY DATA SHEET
239 416 YELLOW (50J883416400)

SECTION II - HAZARDOUS INGREDIENTS (cont.)

HAZARD STATEMENT:

SECTION III - PHYSICAL DATA

APPEARANCE : Yellow Powder
WEIGHT PER GALLON : N/AV
BOILING RANGE : N/AP
VOC : 0 % (See Note in Section XII - Addendum)
VAPOR DENSITY : Non Volatile
EVAPORATION RATE : Non Volatile
SOLUBILITY IN WATER : Insoluble

SECTION IV - FIRE AND EXPLOSIVE HAZARD DATA

FLASH POINT : N/AP
FLAMMABILITY CLASS : NON-COMBUSTIBLE
LOWER EXPLOSION LIMIT : N/AP
UPPER EXPLOSION LIMIT : N/AP

EXTINGUISHING MEDIA:

Water.

FIRE FIGHTING PROCEDURES-SPECIAL:

Fire-Fighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires.

Use water spray to cool nearby containers and structures exposed to fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

This product will not burn. Use appropriate techniques to fight surrounding fire.

MATERIAL SAFETY DATA SHEET
239 416 YELLOW (50J883416400)

SECTION V - REACTIVITY DATA

STABILITY : Stable
HAZARDOUS POLYMERIZATION : Will not occur

CONDITIONS TO AVOID:

None Known.

INCOMPATIBILITY:

None known.

HAZARDOUS DECOMPOSITION:

Will not occur.

SECTION VI - HEALTH HAZARD DATA

This product contains either pigment(s) that belong to the mixed metal oxide pigment class and/or frit which is an amorphous glassy material. These ingredients have been chemically reacted at high temperatures. They consist of metal atoms and oxygen atoms arranged in unique structures; the toxicological properties have not been thoroughly investigated. A small percentage of the starting materials may remain in this product and are considered hazardous under OSHA.

PRIMARY ROUTES OF EXPOSURE:

Inhalation, dermal and ingestion.

OVEREXPOSURE EFFECTS:

CONTAINS CADMIUM COMPOUNDS:

Overexposure to cadmium by inhalation can result in a metallic taste in the mouth, headache, shortness of breath, chest-pain, weakness, leg pains and fluid in the lungs.

SECTION VI - HEALTH HAZARD DATA (cont.)

OVEREXPOSURE EFFECTS:

These signs and symptoms may be delayed, sometimes occurring four to eight hours following exposure. Kidney and liver damage may also occur. Swallowing can result in severe nausea, vomiting, diarrhea, stomach cramps, salivation, headache, muscle cramps and dizziness.

Long term overexposure to the fumes and dust of cadmium have been associated with emphysema, bronchitis and kidney damage. Chronic overexposure to the metal and cadmium compounds, such as cadmium oxide, cadmium sulfide, cadmium sulfate and cadmium chloride, may result in lung cancer, although a definite cause-effect relationship has not been fully established.

CONTAINS CRYSTALLINE SILICA:

Crystalline silica can cause silicosis, a lung disease characterized by coughing, wheezing, impaired lung function and increased sputum production. This damage can be progressive and may cause death. May cause cancer following repeated and prolonged inhalation of the fine dust. Smoking aggravates these effects. Skin and eye contact may cause irritation due to mechanical abrasion.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Populations at increased risk to cadmium include individuals with kidney disease, genetic differences in induction of metallothionein and dietary deficiencies in metal ions and/or protein.

EMERGENCY AND FIRST AID PROCEDURES:

EYES:

For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. Get immediate medical

SECTION VI - HEALTH HAZARD DATA (cont.)

EYES:

attention.

SKIN:

For skin contact, wipe away excess material with dry towel. Then wash affected areas with plenty of water, and soap if available, for several minutes. Get medical attention if irritation occurs.

INHALATION:

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

INGESTION:

If swallowed, give at least 3-4 glasses of water, but do not induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Get medical attention.

PHYSICIAN'S NOTE:

Use of this product is regulated by the OSHA Cadmium Standard (29 CFR 1910.1027). The extensive medical surveillance and worker removal provisions of this standard should be consulted. Cadmium and its inorganic compounds are harmful to the kidneys and lungs.

SECTION VII - TOXICOLOGY INFORMATION

Toxicology data of some components is available upon request. Please contact the Product Safety Specialist at (412) 223-5900.

SECTION VIII - SPILL OR LEAK PROCEDURES

SECTION VIII - SPILL OR LEAK PROCEDURES (cont.)

SPILL PROCEDURES:

Wear appropriate protective equipment. Avoid the generation of dust. Vacuum or shovel material and place in closable container(s) for disposal.

Dry sweeping of cadmium containing dust is a violation of the OSHA Cadmium Standard (29 CFR 1910.1027).

For clean up of cadmium containing products HEPA (high efficiency particulate air-purifying) filtered vacuuming equipment or equally effective filtration methods shall be used and emptied in manner that minimizes the reentry of cadmium into the workplace.

WASTE DISPOSAL METHODS:

Dispose in accordance with Federal, State and Local regulations.

SECTION IX - SPECIAL PROTECTION INFORMATION

VENTILATION:

Adequate ventilation should be provided to keep dust and vapor concentrations below acceptable Exposure Limits. Discharge from the ventilation system should comply with the applicable air pollution control regulations. Eliminate ignition sources.

If air from exhaust ventilation is recirculated into the workplace, the system shall have a high efficiency filter and be monitored to assure effectiveness in accordance with the OSHA Cadmium Standard (29 CFR 1910.1027).

PROTECTIVE GLOVES:

Use gloves as a standard industrial handling procedure.

SECTION IX - SPECIAL PROTECTION INFORMATION (cont.)

EYE PROTECTION:

Wear safety glasses or goggles to protect against exposure.

RESPIRATORY PROTECTION:

Appropriate respiratory protection is required when exposure to airborne contaminant is likely to exceed acceptable limits. Respirators should be selected and used in accordance with OSHA Subpart I (29 CFR 1910.134) and manufacturer's recommendations.

OTHER PROTECTIVE EQUIPMENT:

None specified.

SECTION X - SPECIAL PRECAUTIONS

LABELING INFORMATION:

DANGER!

Contains cadmium which is a cancer hazard. Cadmium can cause lung and kidney disease.

Skin, eye and respiratory irritant.

Contains crystalline silica which can cause lung damage, including cancer.

Keep away from heat and flame.

Avoid contact with eyes, skin and clothing.

Do not breathe dust.

Keep away from food products.

Wash thoroughly after handling and before eating, drinking or using cosmetic or tobacco products or toilet facilities.

Handle in accordance with the OSHA Cadmium Standard.

Use with adequate ventilation.

Keep container closed when not in use.

FIRST AID:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water. Remove contaminated clothing. Get medical attention.

MATERIAL SAFETY DATA SHEET
239 416 YELLOW (50J883416400)

SECTION X - SPECIAL PRECAUTIONS (cont.)

LABELING INFORMATION:

IN CASE OF FIRE:
Use water, dry chemical or carbon dioxide.
IN CASE OF SPILL:
Vacuum and dispose in accordance with federal, state and
local regulations.
For industrial use only.

SECTION XI - REGULATORY INFORMATION

SARA 313 TITLE III - TOXIC CHEMICALS LIST:

90% Cadmium Compound : <1% Metal As Cd

PENNSYLVANIA RIGHT-TO-KNOW ACT:

Cadmium Yellow Zircon Pigment	72968-34-4*	S
Quartz	14808-60-7	H

S = Pennsylvania Special Hazardous Substance
H = Pennsylvania Hazardous Substance

TOXIC SUBSTANCE CONTROL ACT (TSCA):

This product (and/or all of its components) is in compliance
with the U.S. EPA Toxic Substance Control Act (15 U.S.C. 2604).

SECTION XII - ADDENDUM

DEFINITIONS AND ABBREVIATIONS :

Note: The V.O.C., listed in Section III, Physical Data, is an
estimated/calculated value based upon the EPA Method 24 for

SECTION XII - ADDENDUM (Cont.)

determining V.O.C.

- ACGIH = American Conference of Governmental Industrial Hygienists
- C (Ceil) = The concentration that shall not be exceeded during any part of the working exposure.
- CAS = Chemical Abstracts Service Registry Number
- EPA = Environmental Protection Agency
- IARC = International Agency for Research on Cancer
- LEL = Lower Explosion Limit
- N/AP = Not Applicable
- N/AV = Not Available
- NIOSH = National Institute for Occupational Safety and Health
- NTP = National Toxicology Program
- OSHA = Occupational Safety and Health Administration
- PEL = Permissible Exposure Limits
- SARA = Superfund Amendments and Reauthorization Act
- STEL = Short Term Exposure Limit. Usually a 15 minute time weighted average exposure that should not be exceeded at any time during a work day.

- TLV = Threshold Limit Values
- TSCA = Toxic Substance Control Act
- TWA = Time Weighted Average. Exposure concentration for a normal 8 hour work day and a 40 hour work week.

- VOC = Volatile Organic Content

DISCLAIMER

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.