



**OVER GLAZE CHINA PAINT #'S – 46 – 47 – 48 – 49 – 50  
51 – 62 – 63 – 90 – 94 – 339**

**1 PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier: Over Glaze China Paint  
SDS Number: WCP-46, WCP-47, WCP-48, WCP-49, WCP-50, WCP-51, WCP-62, WCP-63, WCP-90, WCP-94, WCP-339  
Revision Date: 10/2017  
Chemical Family: Decorative Coating  
Product Synonym: Glass Enamel/Flux  
CAS Number: Mixture  
Supplier Details: Willoughby's China Paints & Supplies  
6329 176<sup>th</sup> St. SW  
Lynnwood, WA 98037  
Emergency: IN CASE OF EMERGENCY PLEASE CONTACT YOUR REGIONAL/LOCAL POISON CONTROL CENTER

The identity of the individual components of this product is proprietary information and is considered a trade secret pursuant to 29 CFR 1910.1200.

**2 HAZARDS IDENTIFICATION**

Classification of the Substance or Mixture  
GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):  
Health, Aspiration hazard, 1  
Health, Serious Eye Damage/Eye Irritation, 1  
Health, Skin corrosion/Irritation, 1  
Environmental, Hazards to the aquatic environment – Acute, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

- H304 – May be fatal if swallowed and enters airways
- H319 – Causes serious eye irritation
- H316 – Causes Mild skin irritation
- H313 – May be harmful in contact with skin
- H303 – May be harmful if swallowed
- H401 – Toxic to aquatic life

### GHS Precautionary Statements:

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.

P280 – wear protective gloves/protective clothing/eye protection/face protection

P301+312 – if SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.

P301+330+331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+350 – IF ON SKIN: Gently wash with soap and water.

P305+351+338 – IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Titanium Dioxide is listed by IARC as possibly carcinogenic to humans (group 2B) based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. Respirable crystalline silica has been classified as a Group 1 (sufficient evidence in humans for carcinogenicity) carcinogenic by IARC and is listed by NTP as a substance which may reasonable be anticipated to be a carcinogen. Long term inhalation causes lung damage (silicosis and cancer). Cadmium is a cumulative poison and can build up in the body over time to toxic levels. Cadmium causes lung damage and kidney dysfunction and may cause lung or prostate cancer. Lead is a cumulative poison and can build up in the body over time to toxic levels. Lead overexposure can cause anemia, pale skin, a blue line at the gum margin, decreased coordination and muscle strength, abdominal pain, severe constipation, nausea, vomiting, paralysis of the wrist joint, decreased fertility, and kidney damage.

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

### INGREDIENTS:

Case # & Chemical Name: Mixture

Components	CAS Number	Weight %
Pyrochior, antimony lead yellow	8012-00-8	20-30%
Frit*		80-90% (May contain-see below)
Cadmium Oxide	1306-19-0	<0.5%
Lead Oxide	1317-36-8	<0.5%
Titanium Dioxide	13463-67-7	<0.5%
Quartz silica	14808-60-7	<0.5%
Iron Cobalt chromite black spinel	68186-97-0	10-20%
Boron	7440-42-8	15%
Chromium III Oxide	1308-38-9	10%
Aluminum Oxide	1344-28-1	
Cobalt Silicate Blue Olivine	68187-40-6	10-20%
Cobalt Aluminate Blue Spinel	1345-16-0	10-20%
Cadmium Silicate	13477-19-5	<0.5%

\* 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.

The ingredients in this formulation are a trade secret. All ingredients in the formula are non-hazardous, unless specified in Sections 2 and 15

## 4 FIRST AID MEASURES

**Inhalation:** Move individual to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin Contact:** Wash off with soap and plenty of water. Consult a physician if irritation develops

**Eye Contact:** Flush eyes with plenty of running water as a precaution. Get medical attention.

**Ingestion:** If swallowed, give at least 3-4 glasses of water, but, do not induce vomiting. Rinse mouth with water. Consult a physician

## 5 FIRE FIGHTING MEASURES



Health = 1   Fire = 1   Reactivity = 0

NFPA - National Fire Protection Association (U.S.A.)

**Osha Flammability Class:** Non-Combustible

**Flash Point:** Non-Combustible

**Lower Explosive Limit:** Not Applicable

**Upper Explosive Limit:** Not Applicable

**Extinguishing Media:** Carbon dioxide (co2), Dry chemical. Water spray mist or foam.

**Hazardous decomposition products:** Thermal decomposition can lead to release of irritating gases and vapors. Heavy metal compounds. CdO. Lead Oxides.

**Fire Fighting Procedures:** Fire-Fighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Use water spray to cool containers and structures exposed to fire.

**Unusual Hazards:** None known.

## 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective equipment, emergency procedures:** Avoid contact with the material. See section 8 of SDS for PPE recommendations.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

**Regulatory Requirements:** Dispose of recovered material in accordance with all applicable state and federal regulations. Use vacuum cleaner equipped with a heap-type filter.

## 7 HANDLING AND STORAGE

**Handling and Storage:** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing fumes. Avoid contact with eyes, skin and clothing.  
Keep container tightly closed in a dry and well-ventilated place, and keep upright to prevent leakage. Do not take internally.

**Exposure Limits:**

**Additional Exposure info. Minimize exposure in accordance with good hygiene practice.**

Components	OSHA	ACGIH
Frit	50 ug/m <sup>3</sup> TWA Pb 0.5 mg/m <sup>3</sup> TWA Sb 5 mg/m <sup>3</sup> TWA Zr 5 mg/m <sup>3</sup> Ceiling Mn	10 mg/m <sup>3</sup> STEL Zr 0.05 mg/m <sup>3</sup> TWA Pb 0.01 mg/m <sup>3</sup> TWA Cd 0.002mg/m <sup>3</sup> TWACd respirable fraction 0.5 mg/m <sup>3</sup> TWA Sb 5 mg/m <sup>3</sup> TWA Zr 0.2 mg/m <sup>3</sup> TWA Mn
Pyrochior, antimony lead yellow	50 ug/m <sup>3</sup> TWA Pb 0.5 mg/m <sup>3</sup> TWA Sb	0.05 mg/m <sup>3</sup> TWA Pb 0.5 mg/m <sup>3</sup> TWA Sb
Cadmium Oxide	2.5 ug/m <sup>3</sup> action level (as Cd); 5 ug/m <sup>3</sup> TWA (as Cd)	0.01 mg/m <sup>3</sup> TWA Cd 0.002 mg/m <sup>3</sup> TWA Cd respirable fraction
Lead Oxide	50 ug/m <sup>3</sup> TWA Pb	0.05 mg/m <sup>3</sup> TWA Pb
Titanium Dioxide	15 mg/m <sup>3</sup> total dust	10 mg/m <sup>3</sup> TWA
Quartz Silica	Listed	0.025 mg/m <sup>3</sup> TWA respirable fraction
Iron Cobalt chromite black spinel	2.0 mg/m <sup>3</sup> TWA Sn	2.0 mg/m <sup>3</sup> TWA Sn
Boron	10.0 mg/m <sup>3</sup> TWA B	10.0 mg/m <sup>3</sup> TWA B
Chromium III Oxide	0.5 mg/m <sup>3</sup> TWA B	0.5 mg/m <sup>3</sup> TWA B
Aluminum Oxide	TWA total dust: 15 mg/m <sup>3</sup> TWA respirable fraction: 5 mg/m <sup>3</sup>	TWA as Al: 10 mg/m <sup>3</sup>
Cadmium Silica	Not Established	0.01 mg/m <sup>3</sup> TWA Cd 0.002 mg/m <sup>3</sup> TWA Cd respirable fraction

<b>Engineering Measures:</b>	<b>Provide appropriate exhaust ventilation at machinery and at places where dust or fumes can be generated. Ensure that eyewash stations and safety showers are proximal to the work-station location.</b>
<b>Skin &amp; body protection:</b>	<b>Lightweight protective clothing. Remove and wash contaminated clothing before re-use.</b>
<b>Eye Protection:</b>	<b>Wear safety glasses with side shields; protect against splashing.</b>
<b>Hand Protection:</b>	<b>Impervious gloves.</b>
<b>Respiratory protection:</b>	<b>In case of insufficient ventilation wear suitable respiratory equipment.</b>
<b>Hygiene measures:</b>	<b>Wash hands before breaks and at the end of workday.</b>

<b>Appearance:</b>	Blue	<b>Odor:</b>	None
<b>Physical State:</b>	Powder	<b>Molecular Formula:</b>	No data available
<b>Odor Threshold:</b>	No data available	<b>Water Solubility:</b>	Insoluble
<b>Spec Grav./Density:</b>	No data available	<b>Softening Point:</b>	No data available
<b>Viscosity:</b>	No data available	<b>Percent Volatile:</b>	No data available
<b>Sat. Vap. Conc.:</b>	No data available	<b>Heat Value:</b>	No data available
<b>Boiling Point:</b>	No data available	<b>Freezing/Melting Pt.:</b>	No data available
<b>Flammability:</b>	No data available	<b>Flash Point:</b>	No data available
<b>Partition Coefficient:</b>	No data available	<b>Octanol:</b>	No data available

Vapor Pressure:	No data available	Vapor Density: Air=1	Non-Volatile
pH:	No data available	VOC content (%):	0
Evap. Rate (water=1):	Non-Volatile	Bulk Density:	No data available
Molecular Weight:	No data available	Auto-Ignition Temp:	No data available
Decomp Temp:	No data available	UFL/LFL:	No data available

## 10 STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Reactivity:	Stable under recommended storage conditions.
Conditions to Avoid:	Fumes from firing in kiln.
Materials to Avoid:	None Know.
Hazardous decomposition products:	No decomposition if stored normally. Thermal decomposition can lead to release of irritating gases and vapors.
Polymerization:	Will not occur.
Conditions to avoid:	None Known.

## 11 TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Information given is based on data on the components and the toxicology of similar products.

**Chronic Toxicity:** Human epidemiology studies do not suggest an association between occupational exposure to titanium dioxide and risk for cancer. Contains crystalline silica which causes silicosis and lung cancer.

**Carcinogenic Effects:** Cadmium and cadmium compounds (as respirable dust/aerosols) have proven to be carcinogenic. Respirable crystalline silica has been classified as a Group I (sufficient evidence in humans for carcinogenicity) carcinogenic by IARC and is listed by NTP as a substance which may reasonably be anticipated to be a carcinogen. Crystalline silica is also a known cause of silicosis, a non-cancerous lung disease caused by excessive exposure to crystalline silica.

**Target Organ Effects:** Titanium dioxide: Respiratory system . Antimony: lungs, respiratory system. Silica: Respiratory system. Lead may damage kidney function, the blood forming system and the reproductive system. Central nervous system. Cadmium compound: Liver, Kidney.

Component information, if any, is listed below

### Frit

LD50s and LC50s:	Oral LD50 (rat) = 2000 mg/kg
OSHA – Select Carcinogens:	Present
NTP:	Known Human Carcinogen
NTPS. Carcinogen:	Reasonable Anticipated to Be A Human Carcinogen
IARC – Group 1:	Listed

IARC – Group 2A: Listed

IARC – Group 2B: Listed

Pyrochlor, antimony lead yellow

OSHA – Select Carcinogens: Present

NTPS. Carcinogen: Reasonably Anticipated To Be A Human Carcinogen

IARC – Group 2A: Listed

Cadmium Oxide

LD50s and LC50s: Inhalation LC50 (rat) =45mg/m<sup>3</sup>  
Oral LD50 (rat) =72 mg/kg

OSHA – select carcinogens: Present

NTP: Known Human Carcinogen

IARC – Group1: Listed

Titanium Dioxide

LD50s and LC50s Oral LD50 (rat) = 10000 mg/kg

OSHA – Select Carcinogens: Present

IARC – Group 2B Listed

Quartz Silica

LD50s and LC50s: Oral LD50 (rat) = 500 mg/kg

OSHA – Select Carcinogens: Present

NTP: Known Human Carcinogen

IARC – Group 1: Listed

Lead Oxide

LD50s and LC50s: Oral LD50 (rat = 10000 mg/kg

OSHA – Select Carcinogens: Present

NTPS. Carcinogen: Reasonably Anticipated To Be A Human Carcinogen

IARC – Group 2A Listed Titanium Dioxide

LD50s and LC50s Oral LD50 (rat) = 10000 mg/kg

OSHA – Select Carcinogens: Present

IARC – Group 2B Listed

Pyrochlor, antimony lead yellow

OSHA – Select Carcinogens: Present

NTPS. Carcinogen: Reasonably Anticipated To Be A Human Carcinogen

IARC – Group 2A: Listed

Cobalt Silicate Blue Olivine

OSHA – Select Carcinogens: Present

IARC - Group 2B: Listed

Cobalt Aluminate Blue Spinel

OSHA – Select Carcinogens: Present

IARC – Group 2B: Listed

## Boron

OSHA – Select Carcinogens: Present  
NTP: Known Human Carcinogen  
IARC – Group 1: Listed

## Chromium (III) Oxide

LD50s and LC50s: Oral LD50 rat: >1000 mg/m<sup>3</sup>:  
Dermal LD50 Rat:> 2000 mg/m<sup>3</sup>  
Inhalation LC50 Rat: >2.01 mg/m<sup>3</sup>

## Cadmium Silica

OSHA – Select Carcinogens: Present  
NTP: Known Human Carcinogen  
IARC – Group 1: Listed

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## ECOLOGICAL INFORMATION

**Aquatic Toxicity** (The following values are for chemically similar materials):

Fathead Minnow LC50(96hr):	0.298 mg/L static
Daphnia Magna EC50(48hr):	No data available
Gambusia Affinis LC50(96hr):	56000 mg/L static
Medina & Mysid Shrimp LC50(48hr):	No data available
Rainbow Trout LC50(96hr):	No data available
Elimination (persistence & Degradability):	No data available
Bioaccumulative Potential:	No data available
Mobility in Soil:	No data available
Other adverse effects:	No data available

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## DISPOSAL CONSIDERATIONS

**Disposal of Waste Method:** Dispose in accordance with Federal, State and Local regulations.  
**Empty Container Warnings:** Empty containers may contain product residue; follow SDS and label warnings, even after they have been emptied. Where possible recycling is preferred to disposal or incineration.

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## TRANSPORT INFORMATION

**DOT (U.S.) Shipping Name:** Paint related material, Non-Hazardous Mixture  
**DOT Hazard Class:** None  
**DOT Label(s):** None  
**UN/NA Number:** None  
**Packing Group:** None  
**IMDG:** Not dangerous goods  
**IATA:** Not dangerous goods  
**TDG (Canada):** Not regulated

## Regulatory Code Descriptions

U.S. Regulations:

TSCA = Toxic Substances Control Act

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA title III, Section 302.

## SARA 313 Components:

Components	U.S.CERCLA/SARA-Section 313-Emission Reporting
Lead compounds (30 – 40%)	0.1 % Supplier notification limit 0.1 % de Minimis concentration
Cadmium compounds (1-5%)	0.1% de Minimis concentration
Antimony compounds (10-20%)	1.0 de Minimis concentration
Zinc Compounds (1-6%)	1.0% de Minimis concentration
Chromium compounds (1-3)	0.1% de Minimis concentration
Cobalt compounds (1-5%)	0.1% de Minimis concentration
Barium compounds	<1% de Minimis concentration

## SARA 311/312 Hazards:

No SARA hazards.

State Regulations:

This product or its ingredients have been evaluated for New Jersey, Pennsylvania, and California Prop 65 supplier notification requirements. Substances that are subject to notification requirements, if any, are listed below.

Components	PARTK:
Lead compounds	Listed (PARTK)
Cadmium compounds	Listed (PARTK)
Antimony compounds	Listed (PARTK)
Zinc compounds	Listed (PARTK)
Chromium compounds	Listed (PARTK)
Cobalt compounds	Listed (PARTK)

Components	NJRTK:
Quartz silica	Listed (NJRTK)
Lead compounds	Listed (NJRTK)
Cadmium compounds	Listed (NJRTK)
Zinc compounds	Listed (NJRTK)
Antimony compounds	Listed (NJRTK)

Components	State Regulation – CA Prop65
Quartz Silica	Carcinogen
Lead compounds	Carcinogen Developmental Toxicity Reproductive Male Reproductive Female
Cadmium compounds	Carcinogen Developmental Toxicity Reproductive in Male
Zinc compounds	Listed (NJRTK)
Antimony compounds	Listed (NJRTK)
Zinc compounds	Listed (NJRTK)
Chromium compounds	Listed (NJRTK)
Cobalt compounds	Listed (NJRTK)



Canadian WHMIS

WHMIS hazard class:

D2A Very Toxic materials D2B Toxic materials

Canadian Ingredient Disclosure List (IDL):

Components	Canada – WHMIS Ingredient Disclosure:
Lead compounds	0.1
Cadmium compounds	0.1
Antimony compounds	1
Chromium compounds	0.1
Cobalt compounds	0.1

International inventories

TSCA 8(b):	Listed or exempt.
Canadian DSL/NDSL list	All ingredient(s) are listed on the DSL or NDSL
EC-NO	Listed or exempt.
Philippines (PICCS):	Listed
Japan (ENCS):	Listed or exempt.
Korea (KECL):	Listed.
China (IECS):	Listed.
Australia (AICS):	Listed.
New Zealand (NZIoC):	One or more ingredient(s) are not on the NZIoC list

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**OTHER INFORMATION**

**For Industrial Use Only.**

**DISCLAIMER:**

The information provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information, and belief at the date of publication. Colorific Porcelain® does not assume any legal responsibility for use or reliance on same. Customers are encouraged to conduct their own tests before using any product. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release. It is not to be considered as a warranty or quality specification. The information related to only the specific material designed and may not be valid for such material used in combination with any other material or in any process, unless specified in this document.

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\*\*\* END OF SDS\*\*\*