

Date: 02/06/2002

MATERIAL SAFETY DATA SHEET
 PREPARED BY: Environmental, Health and Safety Department
 MSDS PREPARATION DATE: 02/06/2002

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER U. S. COATINGS
 ADDRESS 9200 Latty
 St. Louis, MO 63042
 INFORMATION 314-522-9552
 EMERGENCY 314-239-4703
 TRADE NAME ZINGCARD® FILLER #1
 PRODUCT CODE ZG1GRA1000
 HMS(R) Health= 2*, Flammability= 1, Reactivity= 1

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

1 ZINC CAS# 7440-66-6 ZINC

Pct By Wt: 95.00
 ACGIH TLV-TWA 10 MG/M3 (TOTAL DUST) ACGIH TLV-STEL/C NE
 OSHA PEL-TWA 5 MG/M3 (RESPIRABLE DUST); 10 MG/M3 (TOTAL DUST)
 OSHA PEL-STEL NE OSHA PEL-CEILING NE
 SKIN DESIGNATION NO ODOR THRESHOLD NA
 LD50 (INGESTION) NA LC50 (INHALATION) NA
 AUTOIGNITION TEMP. NA FLASH POINT NA
 Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

2 ZINC COMPOUND CAS# 1314-13-2 ZINC OXIDE

Pct By Wt: 5.00
 ACGIH TLV-TWA 10 MG/M3 (DUST) ACGIH TLV-STEL/C NE
 OSHA PEL-TWA 5 MG/M3 (RESPIRABLE) OSHA PEL-STEL NE
 OSHA PEL-CEILING NE OSHA PEL-CEILING NE
 SKIN DESIGNATION NE SKIN DESIGNATION NE
 ODOR THRESHOLD NA LD50 (INGESTION) 8.0 G/KG (ORAL-MOUSE)
 LC50 (INHALATION) 2.5 MG/M3 (1HL-MOUSE) AUTOIGNITION TEMP. NA
 FLASH POINT NA
 Other Limits: IARC-NO NTP-NO OSHA-NO

3 LEAD CAS# 7439-92-1 LEAD

Pct By Wt: 0.15
 ACGIH TLV-TWA 0.15 MG/M3 ACGIH TLV-STEL/C NE
 OSHA PEL-TWA 0.05 MG/M3
 OSHA PEL-STEL OSHA ACTION LEVEL: 0.03 MG/M3
 OSHA PEL-CEILING NE SKIN DESIGNATION NO
 ODOR THRESHOLD NA LD50 (INGESTION) NA
 LC50 (INHALATION) NA AUTOIGNITION TEMP. NA
 FLASH POINT NA
 Other Limits: IARC-YES, GROUP 2B NTP-NO OSHA-NO ACGIH-NO

4 CAS# 7440-43-9 CADMIUM

Pct By Wt: 0.02
 ACGIH TLV-TWA 0.01 MG/M3 ACGIH TLV-STEL/C NE
 OSHA PEL-TWA 0.005 MG/M3 OSHA PEL-STEL NE
 OSHA PEL-CEILING NE SKIN DESIGNATION NE
 ODOR THRESHOLD NA LD50 (INGESTION) NA
 LC50 (INHALATION) NA AUTOIGNITION TEMP. NA
 FLASH POINT NA
 Other Limits: IARC-YES, GROUP 2A NTP-YES OSHA-NO ACGIH-NO

 This product contains one or more reported carcinogens or suspect/experimental carcinogens which are noted IARC, NTP, OSHA, ACGIH or NIOSH in the Other Limits column.

 This product contains one or more Hazardous Air Pollutants (HAPs) which are regulated under Section 112 of the Clean Air Act.

 This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding or grinding. Airborne nuisance particulates have an ACGIH TLV for Total Dust of 10 mg/M3.

 IMPORTANT! This product may be blended with other products prior to use. Read all warnings and precautions on the MSDSs and labels of all products being blended as the combination may contain the hazards of each component.

SECTION 3 - HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:

EYES: May cause mild irritation; symptoms include: stinging, tearing and redness.
 SKIN: Can cause irritation.

INHALATION: Can cause nasal and respiratory tract irritation. Inhalation of excessive quantities of fume may cause "metal fume fever". Symptoms include headache, fever, chills, muscle aches, nausea, vomiting, weakness and tiredness.

INGESTION: Can cause irritation of the digestive tract, nausea, vomiting and diarrhea. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

POTENTIAL CHRONIC HEALTH EFFECTS: - Prolonged and repeated breathing of vapors, spray mist and/or sanding dust over a period of years may cause diseases of the lungs. - Lead is a cumulative poison. - This product contains LEAD. Dried film of this paint may be harmful if eaten or chewed. Do not apply on toys and other children's articles, furniture, or interior surfaces of any dwelling or facility which may be occupied or used by children. Do not apply on exterior surfaces of dwelling units, such as windowsills, porches, stairs, or railings, to which children may be commonly exposed. Wash hands thoroughly after using this product and before smoking or eating. - Early symptoms of LEAD POISONING are fatigue, disturbance of sleep, and constipation, with more severe exposures followed by colic, anemia, and neuritis (nerve inflammation). Prolonged overexposure can severely damage red blood cell formation, kidneys, and nervous system. Other symptoms include loss of appetite, metallic taste in mouth, anxiety, malaise, nausea, pallor, headache, dizziness, irritability, muscle and joint pains, tremors, flaccid paralysis without anesthesia, muscle weakness, hallucinations and distorted perceptions, gastric and liver changes, and hypertension. Severe toxicity can cause sterility, abortion and neonatal, mortality and morbidity. Very heavy intoxication can sometimes be detected by formation of a dark line on the gum margins, the so called "lead line". The OSHA Lead Standard reports that lead may impair the reproductive systems of both men and women. Damage may also be caused to the unborn fetus.

TARGET ORGANS: Overexposure to this material or its components has been suggested as a cause of the following effects in laboratory animals and/or humans, and may aggravate pre-existing disorders of these organs in humans:

- Birth defects which may include: fetotoxicity, embryotoxicity,
- Infertility and fetal malformations.
- Damage to the red blood cell forming system (Hematopoietic system)
- Kidney damage
- Nervous system damage
- Respiratory system
- Gastrointestinal (GI) tract
- Gingival tissue

SECTION 4 - FIRST AID MEASURES

PRIMARY ROUTE(S) OF ENTRY (X) SKIN (X) BREATHING (X) SWALLOWING

IF IN EYES: Flush eyes with water for at least 15 minutes while holding eyelids apart; Seek medical attention.

IF ON SKIN: Remove contaminated clothing and flush contaminated skin with large amounts of water. If skin is damaged or if symptoms persist seek medical attention. Launder clothing before reuse.

IF INHALED: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; Keep person warm and quiet. If individual is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

IF SWALLOWED: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on their side with head down. If individual is conscious and alert, INDUCE VOMITING by giving syrup of ipecac or by gently placing two fingers at the back of the throat. If possible, do not leave individual unattended.

SECTION 5 - FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES OF THE CHEMICAL: (Unless otherwise noted, data are derived from ingredients existing in this formula at concentrations of 1% by weight or greater, i.e., the flashpoint given is the lowest flashpoint of the ingredients listed in section 2.)

Flashpoint : -N/A
 Explosion Level : Low - -N/A
 : High - -N/A
 Flammability Limits : Lower - -N/A
 : Higher - -N/A
 Auto-ignition Temperature : -N/A
 : of

EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical. Avoid using water.
 UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from heat, sparks, and flame. Do not smoke. Extinguish all pilot lights and turn off all sources of ignition, including heaters, fans and other non-explosion proof electrical equipment, during use and until all vapors are gone. Vapors may ignite explosively. Vapors may spread long distances and beyond closed doors. Prevent build up of vapors by maintaining a continuous flow of fresh air.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT: Self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode. In case of fire, use dry chemical, Foam, CO2 or other approved method for treating a Class B fire. Summon professional firefighters. During a fire, toxic gases and smoke are irritants present from decomposition/combustion. Closed container may explode when exposed to extreme heat.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CLEAN-UP:

SMALL SPILL: Absorb liquid on inert material such as paper, vermiculite, floor absorbent, and transfer to hood.

LARGE SPILL: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, contain area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be absorbed with inert material such as sand, clay, earth, or floor absorbent, and shoveled into containers, with non-sparking tools. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify the proper authorities as required that a spill has occurred.

SECTION 7 - HANDLING AND STORAGE

HANDLING: SENSITIVITY TO STATIC DISCHARGE - Grounding/Bonding required
STORAGE: Keep container tight and upright to prevent leakage. Keep container closed when not in use. Do not store above 49 C/120 F. Do not transfer contents to bottles or unlabeled containers. Protect from freezing. Containers of this material may be hazardous when emptied because they retain product residues (vapor, liquid, and/or solid). When empty, may contain explosive vapors. Do not cut, puncture or weld on or near this container. All hazard precautions given in this data sheet must be observed for empty containers.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION/VENTILATION: Use only with adequate ventilation. Maintain continuous flow of fresh air. Do not breathe vapors, spray mists, or sanding dusts. Use air purifying respirators fitted with organic vapor/HEPA cartridges only if air monitoring of the work area demonstrates solvent and particulate levels do not exceed the respirator Maximum Use Concentration. Use only properly fitted NIOSH approved respirators. Follow respirator manufacturer's directions for use. Engineering or administrative controls should be implemented to reduce exposure. Paint spray booths, local exhaust, and general exhaust systems are advisable to minimize exposure.

PERSONAL PROTECTIVE EQUIPMENT: Use protective equipment to prevent contact with eyes, skin, or clothing. Use solvent resistant safety eyewear with splash guards. Protective garments such as nylon or Tyvek(R) coveralls typically used to protect from light overspray, splatters, etc. Saranex 23-P(R) coveralls recommended for messy applications. Nitrile or natural rubber gloves typically used to protect from minor contact. For prolonged contact, neoprene gloves are better and butyl are best.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance	Gray powder
Odor	-N/A
Physical State	-N/A
pH	-N/A
Vapor Density	-N/A
Boiling Range	Lower - -N/A Higher - -N/A
Freezing Point	-N/A °F
Melting Point	-N/A °F
Water Solubility	-N/A
Specific Gravity	7.031
Formula Weight per Volume	58.5000 LB/GL
VOC	.000 lbs./gal. or 0 g/l
Evaporation Rate	.000 (n-Butyl Acetate = 1)
Viscosity	-N/A
% Volatile by Weight	.0000
% Volatile by Volume	.0000
Coeff of Water-Oil Distribution	-N/A

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID AND INCOMPATIBILITIES: Acids, Chlorinated compounds, Halogenated hydrocarbons, Hydrogen peroxide, Oxidizing agents, Zinc oxide and magnesium can react explosively when heated.

HAZARDOUS DECOMPOSITION PRODUCTS (Including Thermal Decomposition): Carbon dioxide and carbon monoxide, Toxic fumes.

POLYMERIZATION: - Will NOT occur.

STABILITY: - Stable under ordinary conditions of use and storage.

SECTION 11 - TOXICOLOGICAL INFORMATION

No additional toxicological data available. Please refer to Sections 2 & 3.

SECTION 12 - ECOLOGICAL INFORMATION

No ecological data available for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations. Do not incinerate closed containers.

SECTION 14 - TRANSPORT INFORMATION

Not Regulated by DOT

SECTION 15 - REGULATORY INFORMATION

FEDERAL REGULATIONS:

SARA 313 INFORMATION This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

LEAD	CAS# 7439-92-1	PCT BY WT:	.1500
ZINC	CAS# 7440-66-6	PCT BY WT:	95.0000
ZINC OXIDE	CAS# 1314-13-2	PCT BY WT:	4.8300

STATE REGULATIONS: PER CALIFORNIA'S PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause birth defects or other reproductive harm. **STATE REGULATIONS:** PER CALIFORNIA'S PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer.

SECTION 16 - OTHER INFORMATION

FOR INDUSTRIAL USE ONLY: This product is for use by professional, trained personnel using proper equipment, and is not intended for sale to, or use by, the general public.

WARRANTY: Any recommendation of U.S. Coatings contained herein covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however, U.S. Coatings makes no warranty or representation with respect thereto. Use or application of any U.S. Coatings product is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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