Revision Date: 08-05-2011 Product Code: 33509

I. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CHEM-O-PON ZINC CONTAINING PRIMER GRAY

Product Code: 33509 Document ID: M33509

Company: JONES-BLAIR® Company

2728 Empire Central Dallas, TX 75235 1-214-353-1600

Revision Number: 2

Prior Version Date: 07-08-2008 Chemical Family: Epoxy Primer

Intended use: Industrial Maintenance Primer

Emergency Contact: ChemTrec Center Emergency Phone: 1-800-424-9300 International: 703-527-3887

II. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING!

Flammable liquid and vapor. Causes skin irritation. Causes eye irritation. Vapor harmful. Harmful if swallowed.

May be harmful if absorbed through skin.

Routes of Entry:
• Inhalation

Skin contactEye contactIngestion

Skin absorption

Target Organs Potentially Affected by Exposure:

Eyes

Respiratory Tract

LungsSkin

Central nervous system

KidneysLiverBlood

Medical Conditions
Aggravated by Exposure:

Respiratory disorders, including but not limited to asthma and bronchitis.

Eye disorders.
Lung disease
Skin disorders.
Liver disease

Kidney disease

•

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation: Causes lung irritation. Causes nose and throat irritation. Inhalation of dusts produced during

cutting, grinding or sanding of this product may cause irritation of the respiratory tract. May

cause respiratory tract irritation.

Inhalation Toxicity: Vapor harmful. May affect the brain or nervous system causing dizziness, headache or

nausea.

Revision Date: 08-05-2011 Product Code: 33509

Skin Contact: Can cause moderate skin irritation. May cause allergic skin reaction.

Skin Absorption: May be harmful if absorbed through skin.

Eye Contact: Causes eye irritation.

Ingestion Toxicity: Harmful if swallowed. Aspiration of material into the lungs can cause chemical pneumonitis

which can be fatal.

Long-Term (Chronic) Health Effects:

Carcinogenicity: Contains Titanium Dioxide which is listed by IARC as possibly carcinogenic to humans

(Group 2B). This listing is based on inadequate evidence with respect to humans and

sufficient evidence in experimental animals.

Possible cancer hazard. Contains ethylbenzene which may cause cancer based on animal

data. (Risk of cancer depends on duration and level of exposure.)

Reproductive andXylene may cause adverse reproductive and/or developmental effects. Pregnant **Developmental Toxicity:**women may be at an increased risk from exposure. Contains Methyl Ethyl Ketone

women may be at an increased risk from exposure. Contains Methyl Ethyl Ketone, which in animal studies has shown to cause harm to the fetus only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Contains butoxy ethanol which has been shown to cause harm to the fetus in laboratory animal studies. The relevance of these findings to humans is uncertain.

Mutagenicity: Xylene has been shown to be positive in mutagenicity assays.

Inhalation: Dust and fumes can cause nausea, gastric pain and irritation to the upper respiratory tract.

Prolonged and continuous exposure within hours of ZnO formation (from burning zinc) may cause metal fume fever. Symptoms are chills, metallic taste, severe headache. Symptoms

often persist for 24 hours.

NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Skin Contact: Prolonged contact may cause an allergic skin reaction.

Skin Absorption: Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause

minor systemic damage.

III. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | % | CAS# |
|---|---------|-------------|
| Polymer of Epoxy Resin and bisphenol A | 10 - 30 | 25036-25-3 |
| Titanium dioxide | 7 - 13 | 13463-67-7 |
| Barium Sulfate | 5 - 10 | 7727-43-7 |
| Calcium Metasilicate (Particles Not Otherwise | 5 - 10 | 13983-17-0 |
| Classified) | | |
| Limestone | 3 - 7 | 1317-65-3 |
| Talc | 3 - 7 | 14807-96-6 |
| Zinc | 3 - 7 | 7440-66-6 |
| Xylene | 3 - 7 | 1330-20-7 |
| Methyl Isobutyl Ketone | 3 - 7 | 108-10-1 |
| Methyl ethyl ketone | 1 - 5 | 78-93-3 |
| Glycidyl Ether of 3-Alkyl Phenol | 1 - 5 | 171263-25-5 |
| Butoxy Ethanol | 1 - 5 | 111-76-2 |
| n-Butyl alcohol | 1 - 5 | 71-36-3 |
| Ethylbenzene | 0.1 - 1 | 100-41-4 |

IV. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get

medical attention immediately.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if

irritation develops or persists. Thoroughly wash or discard clothing and shoes before reuse.

Revision Date: 08-05-2011 Product Code: 33509

Ingestion: If swallowed, do not induce vomiting. Get medical attention immediately. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially

causing chemical pneumonitis that may be fatal.

V. FIRE FIGHTING MEASURES

Flammability Summary: Flammable liquid and vapor.

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing

agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat

and minimize fire damage.

Fire and/or Explosion Hazards: Vapors may be ignited by sparks, flames or other sources of ignition if

material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back. Container may explode in heat of fire. Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury

or death.

Fire Fighting Methods and Protection: Do not enter fire area without proper protection including self-contained

breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Will not burn, no special instructions available. Use methods appropriate for surrounding

materials.

Do not enter fire area without proper protection including self- contained

breathing apparatus and full protective equipment.

Flammable component(s) of this material may be lighter than water and

burn while floating on the surface.

Hazardous Combustion Products: Sulfur containing gases, Hydrogen, Carbon dioxide, Carbon monoxide,

Toxic gases, Toxic fumes, Hydrocarbons

Flash Point (°F/°C): 51 / 11 Autoignition Temperature (°F/°C): 860.0 / 460.0

Lower Flammable/Explosive Limit, % in air: 1.1 Upper Flammable/Explosive Limit, % in air: 8.0

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Exposure to the spilled material may be irritating or harmful. Follow

personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Shut off ignition sources, including electrical equipment and flames. Do

Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so.

Dike with suitable absorbent material. Gather and store in a sealed

container pending disposal.

VII. HANDLING AND STORAGE

Methods for Clean-up:

Handling Technical Measures and Precautions:

Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Wash thoroughly after

Revision Date: 08-05-2011 Product Code: 33509

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handling. Do not get in eyes, on skin and clothing. May form flammable dust-air mixtures. Guard against dust accumulation of this material. Remove contaminated clothing and wash

before reuse. Follow all protective equipment

recommendations provided in Section VIII. Use non-sparking tools when opening or closing containers. Ground and bond containers when transferring material. "Empty" containers retain product residue (liquid and/or vapor) and can be

dangerous.

Storage Technical Measures and Conditions: Store in a cool dry place. Keep container(s) closed. Keep

away from sources of ignition.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures: Local exhaust ventilation or other engineering controls may be required when handling or

using this product to avoid overexposure. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910. Explosion proof exhaust

ventilation should be used.

Respiratory Protection: General or local exhaust ventilation is the preferred means of protection. In cases where

ventilation is inadequate, respiratory protection may be required to avoid overexposure.

Follow respirator manufacturer's directions for respirator use.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this product.

Wear additional eye protection such as chemical splash goggles and/or face shield when

the possibility exists for eye contact with splashing or spraying liquid, or airborne

material. Have an eye wash station available.

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Skin Protection: Where use can result in skin contact, practice good personal hygiene. Wash hands and

other exposed areas with mild soap and water before eating, drinking, and when leaving

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work. Clothing suitable to prevent skin contact. Wear chemical resistant gloves.

Control Parameters:

| Chemical Name Titanium dioxide Barium Sulfate Calcium Metasilicate (Particles Not Otherwise Classified) | 10 mg/m³ TWA 10 mg/m³ TWA (total); 5mg/m³ (respirable) | ACGIH STEL | 15 mg/m³ TWA (total dust) 15 mg/m³ TWA (total); 5 mg/m³ TWA (respirable) 50 mppcf (15mg/m³) TWA Total Dust; 15 mppcf (5mg/m³) TWA Respirable |
|--|--|---------------------------------|---|
| Limestone | | | fraction 15 mg/m³ (total dust); 5 mg/m³ (respirable fraction) |
| Talc | 20 mppcf TWA | | 2mg/m³ (Respirable Dust) |
| Xylene | 100 ppm TWA; 434 mg/m³ TWA | 150 ppm STEL; 651 mg/m3 STEL | 100 ppm TWA; 435 mg/m³ TWA |
| Methyl Isobutyl Ketone | 50 ppm TWA; 205 mg/m3 TWA | 75 ppm STEL; 307 mg/m3 STEL | 100 ppm TWA; 410 mg/m3 TWA |
| Methyl ethyl ketone | 200 ppm TWA; 590 mg/m³ TWA | 300 ppm STEL; 885 mg/m³ STEL | 200 ppm TWA; 590 mg/m³ TWA |
| Butoxy Ethanol | 20 ppm TWA; 97 mg/m³ TWA | Ŭ | 50 ppm TWA; 240 mg/m³ TWA |
| n-Butyl alcohol | 20 ppm TWA; 61 mg/m3 TWA | | 100 ppm TWA; 300 mg/m3 TWA |
| Ethylbenzene | 100 ppm TWA; 434 mg/m³ TWA | 125 ppm STEL; 543 mg/m³ STEL | 100 ppm TWA; 435 mg/m³ TWA |
| | | | |

IX. PHYSICAL AND CHEMICAL PROPERTIES

Color: Grey

Revision Date: 08-05-2011 Product Code: 33509

Physical State: Liquid **Boiling Point - Low (°F):** 237.0 **Boiling Point - High (°F):** 342.0

Evaporation Rate: 1.6 (n-Butyl Acetate = 1.0)

Odor: Odorless, Ketone Vapor Density: 3.7 (air = 1)20.00 mbar **Vapor Pressure:** VOC (g/l) (Regulatory, Calculated): 348.62

(Actual, Calculated): 348.62 Viscosity: 20 - 30 Z4 Solubility in Water: Minimal: 1-9% Freezing Point (°F): > 50 °F

Octanol/Water Partition Coefficient: Not Available Volatiles, % by Volume (Calculated): 41.76

Volatiles, % by weight (Calculated): 21.61

13.36 - 13.56 lbs./Gal. Densty:

Physical and Chemical Properties are calculated target or range values for single packaged items and do not represent compliance values for multi-component (mixed) systems.

X. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Sparks, open flame, other ignition sources, and elevated

temperatures. Contamination. Contact with water. Elevated

temperatures.

Oxidizing agents, Acids, Caustics (bases, alkalis), Water, Materials to Avoid/Chemical Incompatibility:

Moisture, Alkaline earth metals

Polymerization: Will not occur.

Hazardous Decomposition Products: Sulfur containing gases, Hydrogen, Carbon dioxide, Carbon

monoxide, Toxic gases, Toxic fumes, Hydrocarbons

XI. TOXICOLOGICAL INFORMATION

Component Toxicology Data:

Chemical Name LD50/LC50 **CAS Number**

Polymer of Epoxy Resin and 25036-25-3 Oral LD50 > 2000 mg/kg Dermal LD50 Rat > 2000 mg/kg

bisphenol A

Titanium dioxide 13463-67-7 Oral LD50 Rat > 25 g/kg

Dermal LD50 Rabbit > 10 g/kg

Inhalation LC50 (4h) Rat > 6.82 mg/L

Xylene 1330-20-7 Oral LD50 Rat 4300 mg/kg

4-Methyl-2-pentanone 108-10-1 Oral LD50 Rat 1600 - 3200 mg/kg

Dermal LD50 Rabbit > 10 ml/kg

Inhalation LC50 (4h) 2000 - 4000 ppm

Ethylbenzene 100-41-4

Dermal LD50 Rat 3500 mg/kg

Carcinogens:

Chemical Name CAS Number IARC NTP OSHA Titanium dioxide 13463-67-7 2B 14807-96-6 2B Ethylbenzene 100-41-4 2B

Revision Date: 08-05-2011 Product Code: 33509

XII. ECOLOGICAL INFORMATION

Toxicity data, if available, are listed below.

XIII. DISPOSAL CONSIDERATIONS

Disposal Methods: Refer to other sections of this MSDS to determine the toxicity and

physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

XIV. TRANSPORTATION INFORMATION

This section provides basic shipping classification information and does not contain all regulatory transportation details. Refer to all applicable regulations for domestic, international, air, vessel and ground transportation requirements and restrictions.

DOT Basic Description: Paint
Hazard Class: 3
UN Number: UN1263
Packing Group: II

Other: This product qualifies for a limited quantity exception per CFR173.150(b)(2) and

172.102 Special Provision 149 for inner containers <= 1.3 gallons (5L) and total gross

package wt <= 66 lbs (30kg).

XV. REGULATORY INFORMATION

United States Federal Regulations:

CADA EUC Chamicala

TSCA Status All components of this product are either listed on the TSCA Inventory; or, are not subject to the inventory notification requirements.

CAC #

| Formaldehyde | <u>CAS #</u> 50-00-0 | 96 0.01 - 0.1 |
|------------------------------------|-------------------------|------------------|
| CERCLA | | |
| Zinc | 7440-66-6 | 3 - 7 |
| Xylene | 1330-20-7 | 3 - 7 |
| Methyl Isobutyl Ketone | 108-10-1 | 3 - 7 |
| Methyl Ethyl Ketone | 78-93-3 | 1 - 5 |
| n-Butyl alcohol | 71-36-3 | 1 - 5 |
| Ethyl Benzene | 100-41-4 | 0.1 - 1 |
| SARA 313 | | |
| Zinc | 7440-66-6 | 3 - 7 |
| Xylene (mixed isomers) | 1330-20-7 | 3 - 7 |
| Methyl Isobutyl Ketone | 108-10-1 | 3 - 7 |
| Ethylene glycol mono-n-butyl ether | 111-76-2 | 1 - 5 |
| n-Butyl alcohol | 71-36-3 | 1 - 5 |
| Ethylbenzene | 100-41-4 | 0.1 - 1 |
| | | |

SARA 311/312

Health (Acute): Y
Health (chronic): Y
Fire (Flammable): Y
Pressure: N
Reactivity: N

U. S. State Regulations:

California Prop 65 Chemicals

Revision Date: 08-05-2011 Product Code: 33509

| Cancer | CAS# | <u>%</u> |
|--------------------|------------|-------------|
| Ethyl Benzene | 100-41-4 | 0.1 - 1 |
| Carbon Black | 1333-86-4 | 0.01 - 0.1 |
| Formaldehyde | 50-00-0 | 0.01 - 0.1 |
| Crystalline Silica | 14808-60-7 | 0.001- 0.01 |
| Benzene | 71-43-2 | 0.001- 0.01 |
| Lead | 7439-92-1 | < 10 ppm |
| Reproductive | | |
| Toluene | 108-88-3 | 0.01 - 0.1 |
| Benzene | 71-43-2 | 0.001- 0.01 |
| Lead | 7439-92-1 | < 10 ppm |

Canadian Regulations:

CEPA DSL: The components of this product ARE listed on the Canadian Domestic Substances

List.

WHMIS Hazard Class: B2 D2A

XVI. ADDITIONAL INFORMATION

Prepared By: Regulatory Department

Disclaimer: This MSDS has been prepared in accordance with the OSHA Hazard Communication

Standard (29 CFR 1910.1200) and Canada's Controlled Product Regulations (CPR). To the best of our knowledge the information contained herein is accurate. Determination of safe handling, application and use of this material is the responsibility of the end user. This

information is furnished without warranty, expressed or implied.

Print Date: August 05, 2011