**SECTION 14. TRANSPORTATION INFORMATION**

This section provided for general information only. The shipping description below may not represent requirements for all modes of transportation, packaging, shipping methods or locations outside the United States. FOR MORE COMPLETE TRANSPORTATION REGULATORY INFORMATION PLEASE REFER TO THE SHIPPING DOCUMENTS ACCOMPANYING THE SHIPMENT OF THIS PRODUCT.

**DOT CLASSIFICATION:** Not Regulated

The information provided herein may not include the impact of additional regulatory requirements (eg. for materials meeting the definition of a hazardous waste under RCRA, hazardous substances under CERCLA, and/or marine pollutants under CWA or other similar federal, state, or local laws) or any associated exceptions or exemptions under regulations applicable to the transport of the material.

**SECTION 15. REGULATORY INFORMATION**

**TSWA:** All components are on the TSCA inventory.

Canadian Domestic Substance List (DSL) Is on DSL

China (IECSC) On the IECSC Inventory

Philippines (PICCS) On the PICCS Inventory

SARA - Section 313 (Superfund Amendments and Reauthorization Act of 1986 - 40CFR 372)

Aluminum Oxide 134-28-1

Zinc Compound (SARA 313 Chemical Category Code N982) 1314-131-2

CALIFORNIA PROPOSITION 65 WARNING: This product contains the following chemicals that are know to the State of California to cause cancer, birth defects or other reproductive harm. Unless a concentration is specified in Section 2 of the MSDS, the below chemical/s are present in trace amounts.

**COMPONENT:** CAS NUMBER

Cadmium 7440-43-9

Lead 7439-92-1

**SECTION 16. OTHER INFORMATION**

**HMIS® HAZARD RATINGS:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risk. Although HMIS® ratings are not required on MSDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When 2 ratings are provided for Health, the first represents the material “as supplied”, and the second represents the material “in use”. * = chronic health hazard

**Health /1 Flammability 1 Physical Hazard 0**

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SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES: Evacuate immediate area and dike area to contain spill. Extinguish open flames and ignition sources in the immediate area. Wear proper protective clothing, gloves, and splash goggles. Absorb as much of spilled material as possible with rags, sand, vermiculite or other absorbent material. Scrape absorbable material into designated waste container. Wash area thoroughly with detergent and rinse, taking care to prevent runoff into drains or other waterways. All spilled material, absorbed waste and wash water must be disposed of in accordance with all Federal, State and local regulations. For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

SECTION 7. HANDLING AND STORAGE

STORAGE TEMPERATURE: 25°C

HANDLING/STORAGE: Keep containers properly sealed and store indoors in a well ventilated area. Keep away from heat and sources of ignition.

SENSITIVITY TO STATIC ELECTRICITY: No

SENSITIVITY TO MECHANICAL IMPACT: No

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT: Exposure Limits

ACGIH

OSHA

Mfg. Working Standard

Aluminum 19mg/m³ PEL (total dust); 5mg/m³ Oxide PEL (respirable fraction listed under Particulates not otherwise regulated) 50mppcf TWA (total dust); 15mppcf TWA/total dust) 5mg/m³ TWA (fume); 15mg/m³ TWA (total dust)

Zinc 10mg/m³ STEL (respirable fraction)

Oxide 2 mg/m³ TWA (respirable fraction)

VENTILATION REQUIREMENTS: Local mechanical ventilation. Sufficient to keep vapors below TLV exposure limits.

EYE PROTECTION REQUIREMENTS: Chemical safety glasses

GLOVE REQUIREMENTS: Butyl or natural rubber gloves are recommended.

CLOTHING REQUIREMENTS: Wear protective equipment to comply with good occupational hygiene practice. Wear close fitting goggles or full face shield. Wear suitable gloves or gauntlets. Neoprene or natural rubber is recommended.

CHANGE/REMOVAL OF CLOTHING: Remove contaminated clothing and launder before reuse.

WASH REQUIREMENTS: Showers and eye washing equipment must be provided at handling points. Respiratory protection required if the exposure level is unknown or has been measured and found to exceed the published exposure limits.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PURE SUBSTANCE OR MIXTURE: Mixture

PHYSICAL FORM: Paste

COLOR: White

ODOR: No

ODOR THRESHOLD: Not Available

OXIDIZING PROPERTIES: Not Applicable

SOLUBILITY IN WATER: Insoluble

PARTITION COEFFICIENT (n-octanol/water): Not Determined

SPECIFIC GRAVITY (water=1): 2.53

EVAPORATION RATE: Not Applicable

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (CONT’D)

VAPOR PRESSURE (mmHg): Negligible

VAPOR DENSITY (air=1): Not Applicable

VOLATILES: Negligible

VOLATILES ORGANIC COMPOUNDS: Nil

AUTOIGNITION: Not Available

FLASH POINT: >200°F

SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable

STABILITY DETAIL: Material is stable under normal temperatures and pressures.

MATERIALS TO AVOID: Strong oxidizers, Acids, Bases

CONDITIONS TO AVOID: When heated to very high temperatures, material may emit toxic or irritating fumes

HAZARDOUS DECOMPOSITION PRODUCTS: Silicon dioxide, carbon dioxide and unknown carbon products, Formaldehyde

SECTION 11. TOXICOLOGICAL INFORMATION

ROUTE OF ENTRY: Eye contact. Skin contact. Inhalation; Ingestion

CARCINOGEN IARC (group) NTP OSHA Substance Specific Regulation

COMPONENT: There is no evidence that this product poses a carcinogenic risk under normal conditions of handling and use.

CHRONIC (long term) EFFECTS OF EXPOSURE: TARGET ORGANS Skin

PRODUCT INFORMATION: This data sheet is based on a consideration of the properties of the constituents. May cause irritation to the skin, eyes, and respiratory system.

COMPONENT ORAL TOXICITY NOTES ON ORAL TOXICITY

Aluminum Oxide: Non-toxic

COMPONENT DERMAL TOXICITY NOTES ON DERMAL TOXICITY

Aluminum Oxide: Slight/mild irritant.

COMPONENT INHALATION TOXICITY NOTES ON INHALATION TOXICITY

Aluminum Oxide: Dust may cause irritation

COMPONENT EYE IRRITATION NOTES ON EYE IRRITATION

Aluminum Oxide: Slight/mild irritant. Particles may scratch eye surfaces and cause mechanical irritation

SECTION 12. ECOLOGICAL INFORMATION

POTENTIAL EFFECT ON ENVIRONMENT: Unknown

POTENTIAL TO BIOACUMULATE: Unknown

ECOTOXICITY: Very toxic to aquatic organisms.

ACUTICITY TOXICITY: None Established

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Disposal should be in accordance with local, state or national legislation.

EMPTY CONTAINER WARNINGS: Empty containers may contain product residue; follow MSDS and label warnings even after containers have been emptied.