Material Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

bioMérieux, Inc.
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Hazelwood, MO 63042
For Information Call 1-800-634-7656
Web Site: http://www.biomerieux-usa.com/index.htm

EMERGENCY CONTACT
1-800-424-9300 (Chemtrec)
Or Contact Your Local
Poison Control Center

Product Number: 70380
Product Name: ZN (ZINC DUST)
Product Description: Zinc Dust or Powder

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! Flammable Solid! Reacts with water. May cause irritation to the eyes, skin and respiratory system. Avoid contact with the eyes and skin. Avoid creating and breathing airborne dust. Keep away heat, flames and all other ignition sources. Keep dry. Keep container closed.

US OSHA Classification (29CFR1910.1200): Flammable Solid
EU Classification (1999/45/EC): Highly Flammable (F), Dangerous for the Environment (N) R15, R17, R50/53,

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	COMPONENT	PERCENTAGE
7440-66-6	Zinc Dust or Powder	100%

SECTION 4: FIRST AID MEASURES

Inhalation: Immediately remove the victim to fresh air. If breathing has stopped, give artificial respiration. Get immediate medical attention.

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

Eye Contact: Immediately flush eyes with large amounts of water while holding the eyelids open to assure that the entire surface is flushed. Get prompt medical attention.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Keep victim calm and get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media: Use dry chemical, soda ash, lime or sand. Do not use water or foam.
Special Fire Fighting Procedures: Firefighters should wear self-contained breathing apparatus and full protective clothing.
Unusual Fire and Explosion Hazards: Highly flammable powder. Reacts with water releasing flammable hydrogen gas. May ignite spontaneously on exposure to air or moisture. Forms explosive mixtures in air.
Hazardous Combustion Products: Zinc oxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition. Wear protective equipment (gloves and safety glasses). Keep dry. Carefully collect spilled material. Avoid creating airborne dust. Keep dry. Place in dry container for disposal.

SECTION 7: HANDLING AND STORAGE

Follow the directions on the package insert. Follow prudent laboratory practices of avoiding contact (breathing, touching, smoking ...) with a laboratory reagent. Avoid breathing dust. Avoid contact with the skin and eyes.

Follow storage instructions on the product label. Keep away from all sources of ignition. Keep dry.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Component	Exposure Limits
Zinc Dust or Powder	15 mg/m3 PEL-TWA (as total dust)

Ventilation: If concentrations exceed the exposure limit, use explosion-proof local exhaust.
Respiratory Protection: If exposures exceed the occupational exposure limits wear an approved dust, fume, or mist respirator; or supplied air respirator.
Gloves: Impervious gloves such as rubber.
Eye Protection: Safety glasses.
Other Protective Equipment/Clothing: None.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Grey powder with no odor.

pH: Not Applicable	**Boiling Point:** 907°C / 1664.6°F
Vapor Pressure: Not Applicable	**Melting Point:** 417°C / 782.6°F
Vapor Density: Not Applicable	**Percent Volatile:** 0%
Evaporation Rate: Not Applicable	**Specific Gravity:** 7.14
Water Solubility: Insoluble	**Coefficient of Oil/Water:** Not Applicable
Flash Point: Not Applicable	**Autoignition Temp:** 460°C / 860°F (Flammable Solid)
Flammability Limits: **LEL:** 500 gm/m3	**UEL:** Not Determined

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Reacts with water and moisture.
Incompatibility: Oxidizers, acids, alkalies, aluminum powder, chlorates, halocarbons, halogens, sulfur.
Hazardous Decomposition Products: Combustion produces zinc oxide. Contact with water liberates highly flammable hydrogen gas.
Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE HEALTH HAZARDS

Inhalation: Inhalation of dust may cause respiratory irritation. Inhalation of freshly formed oxide may cause metal fume fever, a flu-like illness with symptoms of metallic taste in mouth, coughing, fever, chills and muscular pain. Symptoms usually subside within 24-36 hours.
Skin Contact: Contact may cause mild irritation.
Eye Contact: Contact may cause mild irritation.
Ingestion: Ingestion of large doses may cause gastrointestinal irritation with nausea, cramps, vomiting, dehydration, electrolyte imbalance, shock, kidney failure, coma and possibly death.
Chronic Health Hazards: Excessive absorption of zinc may cause copper deficiency anemia.
Carcinogen Status: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing skin or respiratory disease may be at increased risk from exposure to this material.

Acute Toxicity Values:
Zinc: Oral LD50 Rat: 630 mg/kg; Inhalation TCLo human: 124 mg/m3/50M.

SECTION 12: ECOLOGICAL INFORMATION

This product is classified as very toxic to aquatic organisms with possible long term adverse effects.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of product in accordance with all local, state/provincial and federal regulations.

Container Disposal: Empty containers should be collected for proper disposal.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Zinc Dust
DOT Hazard Class: 4.3(4.2), PG II
UN Number: UN1436
DOT Labels Required (49CFR172.101): Dangerous When Wet, Spontaneously Combustible
DOT Packaging Requirements: 49 CFR 173.212 and 49 CFR 173.242
Exceptions: None

IATA Shipping Name: Zinc Dust
IATA Hazard Class: 4.3(4.2), PG II
UN Number: UN1436
IATA Hazard Labels Required: Dangerous When Wet, Spontaneously Combustible
IATA Packaging Requirements: Passenger - 415; Cargo – 417
Comments: Up to 25 kits (50-10 g bottles of Zinc Dust) in a package can be shipped under IATA as "Dangerous Goods in Excepted Quantities". Kits in packages that do not exceed a gross mass of 64 lbs can be shipped under DOT (173.4) as excepted small quantities (inner receptacle max 30 mL).

IMDG Shipping Name: Zinc Dust (Marine Pollutant)
IMDG Class: 4.3(4.2), PG II
UN Number: UN1436
IMDG Label: Dangerous When Wet, Spontaneously Combustible, Marine Pollutant Mark

SECTION 15: REGULATORY INFORMATION

SARA 311/312: Hazard Categories for SARA 311/312 Reporting: Acute health, fire hazard

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Section 313(40 CFR372): Zinc 100%

CERCLA Section 103 Reportable Quantity: This product is subject to CERCLA reporting requirements. The RQ for the product is based on the RQ for Zinc (100% maximum) of 1,000 lbs, is 1,000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product contains the following substances known to the State of California to cause cancer and/or reproductive harm: None known

Canada WHMIS Classification: Class B-6; Class D-2-B

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

SECTION 16: OTHER INFORMATION

NFPA Hazard Rating: Health: 1 Fire: 3 Reactivity: 2

Revision History:	**07/09/1993:**	**New MSDS**
	04/02/1996:	**Revised**
	10/12/1999:	**Revised**
	02/04/2003:	**Revised**
	04/14/2006:	**Revised**
	09/27/2007:	**Revised**
	03/14/2013:	**Comprehensive review and format change: Changes to all sections.**

The above information is believed to be correct as of the date of this sheet but does not purport to be all inclusive and shall be used only as a guide. Since the use of this information and the conditions of use of the product are not within the control of bioMérieux S.A. nor bioMérieux, Inc., it is the user's obligation to assure safe use of this product