MATERIAL SAFETY DATA SHEET (MSDS)



E. VERNON 643 Martin Ave • Suite 3 Rohnert Park CA 94928 Phone: (707) 584-9384 Fax: (707) 584-8712 www.evhill.com • info@evhill.com

Revision Date: 9/15/2004 For the following products: #17-023 Borozin Gun Kit #17-024 Borozin Gun Refill

SECTION I: MATERIAL IDENTIFICATION

Material Name: Zinc Stearate UN Number: none

Chemical Family: Inorganic Salt CAS Registry Number: 557-05-01

Other Designations: Octadeconoic Acid, Zinc Salt; Stearic Acid, Zinc Salt; Zinc Distearate; Dibasic Zinc Stearate;

Dermarone; Metallac; Talculin Z; Synpro Stearate

Chemical Formula: $Zn(C_{18}H_{25}O_{2})$

SECTION II: INGREDIENTS AND HAZARDS

Component	Amount	Hazard Data
Zinc Stearate		
Exact product composition depends on purity of tallow used.		

SECTION III: PHYSICAL DATA

Melting Point: 243° F (120° C) Boiling Point: n/a

Decomposition Temperature: n/a pH: n/a

Vapor Pressure at 15°C: n/a Water Solubility at 20°C: Not soluble

Tap Density: 0.28 g/ml

Appearance and Odor: Fine soft white bulk powder with a slight fatty acid odor.

SECTION IV: FIRE AND EXPLOSION DATA

Flash Point and Method: > 120°C **Autoignition Temp.**: $> 120^{\circ}$ C Flammability Limits in Air: N/A

Recommended Extinguishing Media: Water (mist), CO2, Dry Powder Avoid Using Extinguishing Media: CO₂ in closed rooms, Water Jets

Special Fire Fighting Procedures: Slight fire hazard when exposed to heat or flame—any finely dispersed particles are

explosive. Avoid dust concentrations. Dust-air mixtures could cause explosions.

SECTION V: REACTIVITY DATA

Stable: Yes

Incompatible With: Strong Oxidizers, Strong Alkalies, Peroxides, Oxygen and Acids.

Hazardous Decomposition Products: Burning may produce carbon monoxide or zinc oxide fumes.

Polymerization: None reported under normal temperatures and pressures.

Conditions to Avoid: May burn but does not readily ignite.

Borozin Powder MSDS Rev. 9/15/2004

SECTION VI: HEALTH HAZARD INFORMATION

EXPOSURE/HEALTH EFFECTS:

Inhalation: Symptoms from excessive inhalation of dust may include coughing and difficult breathing.

Ingestion: Large doses may cause abdominal spasms and diarrhea.

Skin Contact: May cause skin irritation. Constant exposure to excessive amounts may cause eczema.

Eye Contact: May cause redness and pain.

Chronic Exposures: Grossly excessive and chronic inhalation of the dust may cause a progressive chemical pneumonitis, cyncsis and pulmonary edema.

Aggravation of Pre-Existing Conditions: Persons with preexisting skin disorders, impaired respiratory function, or a history of pulmonary disease should not be exposed to dusts.

FIRST AID:

Inhalation: Immediately remove to fresh air. Get medical advice for any breathing difficulties.

Ingestion: Give several glasses of water to dilute. Obtain medical attention.

Skin Contact: Wash exposed area with soap and water. Get medical advice if irritation develops. **Eye Contact**: Rinse immediately with plenty of water. Get medical advice if irritation develops.

SECTION VII: OCCUPATIONAL CONTROL MEASURES

Airborne Exposure Limits: OSHA PEL: 10 mg/m³ Total Dust, 5 mg/m³ respirable fraction. ACGIH TLV: 10 mg/m³ Total Dust

Ventilation Systems: A system of local and/or general exhaust is recommended to keep employee exposures below the airborne exposure limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document "Industrial Ventilation, A Manual of Recommended Practices" most recent edition for details.

Personal Respirators: If TLV is exceeded, a NIOSH approved dust/mist respirator may be worn up to ten times the TLV. Consult respirator supplier for details.

Skin Protection: Gloves and lab coat, apron or coveralls.

Eye Protection: Use chemical safety goggles. Contact lenses should not be worn when working with this material. Avoid dust dispersal.

SECTION VIII: STORAGE, SPILL, LEAK AND DISPOSAL PROCEDURES

Storage: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Separate from incompatibilities.

Spills & Leaks: Stop small leaks if you can do so without risk. Remove all sources of ignition. Ventilate area of leak or spill. For small spills, take up with sand or other absorbent material and place into clean, dry containers for later disposal. Keep unnecessary people away. Isolate hazard area and deny entry. Cleanup personnel may require protection from inhalation of dust.

SECTION IX: SPECIAL PRECAUTIONS AND COMMENTS

Store in a cool, dry place. Keep product out of the reach of children.

Use only in a well-ventilated place.

Do not use or store around food or food products. Before eating, drinking or smoking, hands and face must be thoroughly washed.

Product should be used only by those familiar with all safety documentation.

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