

MATERIAL SAFETY DATA SHEET

ZINC STEARATE

1. IDENTIFICATION:

1.1 Substance: **ZINC STEARATE**

1.2 Use of the substance: Lubricant

1.3 Company identification: **TKB Trading, LLC**

1101 9th Avenue

Oakland, CA 94606

P: 510 -922-9027

USA IN CASE OF EMERGENCY CALL CHEMTREC 1-800-424-9300 CONTACT ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS.

2. HAZARDS IDENTIFICATION:

- Directive 67/548/EEC: not hazardous
- Physical Hazards: Dust/air mixtures may ignite or explode in presence of sources of ignition
- Carcinogen status: OSHA: No NTP: No IARC: No

3. COMPOSITION/INFORMATION ON INGREDIENTS:

3.1 Main component Zinc salts of commercial stearic acid

- Average Molecular weight 611

- INCI Name - Zinc Stearate

- INN Name - Zinc Stearate

3.2 Directive 1999/45/EC not classified as dangerous

3.3 Concentration 99% approx.

3.4 Additives none

3.5 EINECS No.

EINECS name

CAS No.

209-151-9

Octadecanoic acid, zinc salts

557-05-1

293-049-4

Fatty acids, C16-18, zinc salts

91051-01-3

4. FIRST- AID MEASURES:

- Inhalation: If adverse effects occur, remove victim to fresh air. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.
- Skin contact: Wash skin with soap and water for at least 15 minutes while remove contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry

contaminated clothing and shoes before reuse.

-Eye contact: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

- Ingestion: If a large amount is swallowed, get medical attention.

5. FIRE-FIGHTING MEASURES:

- Suitable Extinguishing Media: regular dry chemical, carbon dioxide, water, regular foam.

Large Fires: Use regular foam or flood with fine water spray. Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

- Special exposure hazards: Slight fire hazard. Powder/air mixture may ignite or explode in presence of ignition sources.

- Special Protective Equipment for Fire-Fighters: self-contained breathing apparatus and full turn out gear.

6. ACCIDENTAL RELEASE MEASURES:

- Personal Precautions: avoid dust formation, do not smoke.

- Environmental Precautions: keep away from drains and ground water and soil.

- Clean Up Methods: sweep up spilled substance but avoid making dust. Store in a closed container.

7. HANDLING AND STORAGE

7.1 Handling: Avoid dust formation and ignition sources. Avoid skin and eye contact. Wash hands after handling. Wear proper personal protective equipment.

7.2 Storage: store in a cool, dry area at room temperature. Shelf life: 24 months.

8. EXPOSURE CONTROLS-PERSONAL PROTECTION

8.1 Exposure Limit Values:

Chemical Name	ACGIH		OSHA - Final PELs
Zinc stearate	10 mg/m ³ TWA (except stearates of toxic metals) (listed under Stearates).	10mg/m ³ TWA (total) 5mg/m ³ TWA (respirable)	15 mg/m ³ TWA (total) 5 mg/m ³ TWA (respirable)

8.2 Exposure Controls: Local Exhaust Recommended to control dust below TLV.

8.2.1 Occupational exposure controls

(a) Respiratory protection: use a NIOSH approved dust respirator, if exposure exceeds TLV.

(b) Hand protection: gloves

(c) Eye protection: safety goggles

(d) Skin and body protection: lightweight protective clothing. Use antistatic shoes.

- General sanitary measures: while working do not eat, drink or smoke, wash hands with soap and water before breaks. Shower or bathe at the end of the workday. Keep work clothes separate.

8.2.2 Environmental exposure controls: not available

9. PHYSICAL AND CHEMICAL PROPERTIES:

9.1 General information

- Appearance: powder
- Colour white
- Odour slightly fatty

9.2 Important health, safety and environmental information

- pH (20 °C, solution in water) 6.5 – 7.5
- Boiling Point - Decomposes
- Flash point 190°C approx. (C.O.C. method)
- Flammability (limits in air) 15 g/m³ for particles <74 μ
- Explosive properties Mixture powder/air: Yes - product: No
- Vapour pressure - None
- Oxidizing properties – None
- Specific Gravity (20 °C) – 1.095
- Solubility - organic solvents, dilute acids
- Water solubility - insoluble
- Partition coefficient: n-octanol/water 1.2
- Viscosity - not applicable
- Vapour density - not applicable
- Evaporation rate - none

9.3 Other information

- Melting point 118 - 128°C
- Ignition temperature 520°C
- Decomposition temperature > 200°C
- Bulk density (typical) 110-360 g/l

10. STABILITY AND REACTIVITY:

10.1 Conditions to avoid: Avoid heat, flames, sparks and other sources of ignition.

10.2 Material to avoid: acids and oxidizers.

10.3 Hazardous decomposition products: Thermal decomposition products: zinc oxide and carbon oxides.

10.4 Reactivity: Stable at room temperatures.

11. TOXICOLOGICAL INFORMATION:

- LD50/oral/rat: > 5 g/kg

12. ECOLOGICAL INFORMATION:

- 12.1 Ecotoxicity: not available
- 12.2 Mobility: not available
- 12.3 Persistence and Degradability: not available
- 12.4 Bioaccumulative potential: not available
- 12.5 Results of PBT assessment: not available
- 12.6 Other adverse effects: not available

13. DISPOSAL CONSIDERATIONS:

- Waste from residues/unused products: can be land-filled in accordance with Federal, State, and Local regulations. Preferred method of disposal is incineration.
- Contaminated packaging: in accordance with Federal, State, and Local regulations.

14. TRANSPORT INFORMATION:

- Not classified as dangerous in the meaning of transport regulations: DOT, IMDG, ADR, RID, ICAO, IATA.

15. REGULATORY INFORMATION:

US FEDERAL

TSCA

CAS# 557-05-1 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 This material is a Zinc compound (N982) and is subject to reporting requirements of section 313 (SARA Title III).

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

Zinc Stearate (CAS # 557-05-1) is listed as a Toxic Pollutant under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 557-05-1 can be found on the following state right to know lists: California (as zinc compounds), Massachusetts, Minnesota, (listed as Stearates) and Pennsylvania.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not Available

Risk Phrases:

Safety Phrases:

S24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

ID Number: 5173 State of Classification: 3 – classification under hazard to water: NWG
CAS# 557-05-1

Canada - WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 557-05-1 is not listed on the Canadian Ingredient Disclosure List.

According to our data the product is not harmful within the meaning of the following directives:

- Council Directive 88/379/EEC of 7 June 1988, Commission Directive 90/492/EEC of 5 September 1990 on dangerous preparations and Regulation (EC) No 1272/2008 (CLP/GHS).

European Community Legislation

REACH: Regulation (EC) No. 1907/2006.

Intermediate lists of pre-registered substances, Oct. 2008, ECHA.

International Inventories:

US TSCA – Listed

Canadian DSL – Listed

Europe EINECS – Listed

Australia AICS – Listed

Korea ECL – Listed

Swiss Giftliste 1 – Listed

Phillipincs PICCS – Listed

Asia-Pac – Listed

New Zealand NZIoC – Listed

China IECSC – Listed

16. OTHER INFORMATION:

HMIS – Hazard Material Information System (U.S.A.)

Health: 1

Fire hazard: 1
Reactivity: 0
Personal Protection: E

Note: The information provided in this Safety Data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

Issued: 8/2013
Supersedes: 1/2011