Safety Data Sheet (SDS)

Revision / Review Date: 11/14/14

1. Chemical Product and Company Identification

Product Name:	Zinc Stearate G
Distributed By:	HB Chemical 1665 Enterprise Parkway Twinsburg Oh 44087 Phone - 330-920-8023
MSDS Prepared By (w Suppliers Input):	HB Chemical
Chemical Name / Family:	Zinc distearate Stearic Acid, Zinc salt
CAS No.:	557-05-1
OSHA Status	Not Hazardous

For emergency health, safety, and environmental information, calls 330-920-8023
For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

2. Hazard(s) Identification

Physical Hazards:	Not classified.
Health hazards:	Not classified.
Environmental hazards:	Not classified.
OSHA defined hazards:	Not classified.
Label elements:	
Hazard symbol:	None.
Signal word:	None.
Hazard statement:	The substance does not meet the criteria for classification.
Precautionary Statement:	
Prevention:	Observe good industrial hygiene practices.
Response:	Wash hands after handling.
Storage:	Store away from incompatible materials.
Disposal:	Dispose of waste and residues in accordance with local authority requirements.
Hazard not otherwise classified (HNOC):	None known.
Supplemental information:	None

3. Composition / Information on Ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Zinc Stearate	Zinc distearate, Zinc salt of stearic acid	557-05-1	100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First Aid Measures

Most important symptoms/effects, acute and delayed:	Coughing. Irritation of eyes and mucous membranes. Upper respiratory tract irritation. Skin irritation
Indication of immediate medical attention and special treatment needed:	Treat Symptomatically.
General information:	Ensure that medical personnel are aware of the material involved and take precautions to protect themselves.
Inhalation:	if dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
Eyes:	Rinse with water. Get medical attention if irritation develops and persists.
Skin:	Wash off with soap and water. Get medical attention if irritation develops and persists.
Ingestion:	Rinse mouth. Get medical attention if symptoms occur.

5. Fire-Fighting Measures

Suitable Extinguishing Media:	Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media:	Do not use water jet as extinguisher, as this will spread the fire.
Special hazards arising from the chemical:	During fire, gases hazardous to health may be formed.
Special protective equipment and Precautions for firefighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-Fighting equipment /instructions:	Move containers from fire area if you can do so without risk.
Specific methods:	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards:	No unusual fire or explosion hazards noted.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Avoid inhalation of dust from the spilled material. Use a NOIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding exposure limits. Do touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection see section 8 of the SDS.

Methods and materials for containment and cleaning up:

the product is immiscible with water and will sediment in water systems. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions:

Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage:

Precautions for safe handling:

Provide appropriate exhaust ventilation at places where dust Is formed.

Conditions for safe storage:

Store in original container. Store in a well-ventilated place. Store away from incompatible materials. (See Section 10 of the SDS.) Store in a cool, dry, ventilated area. Keep containers

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Material	Type	Value	Form
Zinc Stearate (CAS 557-05-1)	PEL	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust

US. ACGIH Threshold Limit Values

Material	Type	Value
Zinc Stearate (CAS 557-05-1)	TWA	10 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Material	Type	Value	Form
Zinc Stearate (CAS 557-05-1)	TWA	5 mg/m3	Respirable
		10 mg/m3	Total

Biological limit values:	No biological exposure limits noted for the ingredients.
Appropriate engineering controls:	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentration of dust particulates below the Occupational Exposure limit (OEL), suitable respiratory protection must be worn.
Respiratory Protection:	Use NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
Thermal hazards:	Wear appropriate thermal protective clothing, when necessary.
Protective Gloves:	Wear appropriate chemical resistant gloves.
Eye Protection:	Use tight fitting goggles if dust is generated.
Skin and Body Protection:	Wear suitable protective clothing.
General hygiene considerations:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants..

9. Physical and Chemical Properties

Appearance	
Physical state	Solid.
Form	Powder, Flakes, Granular.
Color	White.
Odor	Slight
Odor threshold	Not available.
pH	7 – 9 @ 20 °C (in solution)
Melting point/freezing point	266 °F (130 °C)
Initial boiling point and boiling range	Not available.
Flash point	> 212.0 °F (>100.0 °C) Cleveland Open Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not available.
Flammability limit – upper (%)	Not available.

Explosive limit – lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapor pressure	< 0.0000001 kPa @ 25 °C.
Vapor density	Not available.
Relative density	1.095 g/cm3
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	788 °F (420 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.10 g/cm3 estimated

Flammability	Combustible IIIB estimated
Flash point class	Combustible IIIB
Molecular formula	C18-H36-O2.1/2Zn
Molecular weight	632.34 g/mol
Specific gravity	1.1

10. Stability and Reactivity

Reactivity:	The product is stable and non-reactive under normal conditions. of use, storage and transport.
Stability:	This product is stable under normal conditions.
Incompatibility (Materials to Avoid):	Strong oxidizing agents.
Conditions to Avoid:	Avoid temperatures exceeding the flash point. Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Hazardous decomposition products:	No hazardous decomposition products are known.

11. Toxicological Information

Information on likely routes of exposure

Ingestion:	Expected to be a low ingestion hazard.
Inhalation:	Prolonged inhalation may be harmful. Inhalation of dusts may cause respiratory irritation.
Skin contact:	No adverse effects due to skin contact are expected.
Eye contact:	Dust in the eyes will cause irritation.

Symptoms related to the physical physical, chemical and toxicological characteristics:	Coughing. Upper respiratory tract irritation. Irritation of eyes and mucous membranes. Skin irritation.
Information on toxicological effects	
Acute toxicity:	Not available.
Skin corrosion/irritation:	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation:	Dust in the eyes will cause irritation.
Respiratory or skin sensitization:	
Respiratory sensitization:	Not available.
Skin sensitization:	This product is not expected to cause skin sensitization.
Germ cell mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity:	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):	Not listed.
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity- single exposure:	Not classified.
Specific target organ toxicity-repeated exposure:	Not classified.
Aspiration hazard:	Not available.
Chronic effects:	Prolonged inhalation may be harmful.

12. Ecological Information

Ecotoxicity:	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability:	No data is available on the degradability of this product.
Bioaccumulative potential:	No data available.
Mobility in soil:	No data available.
Other adverse effects:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component

13. Disposal Considerations

Disposal instructions:	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations:	Dispose in accordance with all applicable regulations.
Hazardous waste code:	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues /unused products:	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

D.O.T. Shipping Name	Not regulated as dangerous goods.
Air - ICAO (international Civil Aviation Organization)	Not regulated as dangerous goods.
Sea - IMDG (International Maritime Dangerous Goods)	Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations All components are on the U.S. EPA TSCA Inventory List.
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA Hazardous Substance List (40 CFR 302.4)
Zinc Stearate (CAS 557-05-1) Listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Yes
Hazardous chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Zinc coumpounds	557-05-1	100

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Zinc Stearate (CAS 557-05-1)

US. New Jersey Worker and Community Right-to-Know Act

Zinc Stearate (CAS 557-05-1)

US. Pennsylvania Worker and Community Right-to-Know Law

Zinc Stearate (CAS 557-05-1)

US. Rhode Island RTK

Zinc Stearate (CAS 557-05-1)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

HMIS® ratings
Health: 0
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 0
Flammability: 2
Instability: 0

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.