



Zinc Stearate GPSF-VEG, Code 5896

Version 1.1

Revision Date 16.09.2016

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : **Zinc Stearate GPSF-VEG, Code 5896**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Manufacture of plastics products, Manufacture of rubber products, Manufacture of soap and detergents, cleaning and polishing mixtures, Manufacture of paper and paperboard, Manufacture of glues
Polymer additive
Lubricant and release agent, water repellent agent

1.3 Details of the supplier of the safety data sheet

Company : Baerlocher Production USA LLC
5890 Highland Ridge Drive
Cincinnati, OH 45232
Telephone : Day 330-602-1528, 330-602-1531 or -1530
: Night 513-207-1620 or 513-604-2327
E-mail address : Hotline.PS@baerlocher.com
Responsible/issuing person : Product Safety Department

1.4 Emergency telephone number (0 - 24 h)

Tel.: 800-424-9300 USA or 703-527-3887

2. Hazards identification

2.1 Classification of the substance or mixture

OSHA 29 CFR § 1910.1200

Combustible dust : May form combustible dust concentrations in air.

Additional information

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008
This substance is not classified as dangerous according to Directive 67/548/EEC or 1999/45/EC.
WHMIS hazard class – not controlled.

2.2 Label elements

OSHA 29 CFR § 1910.1200

Signal word: Warning

Hazard Statement: May form combustible dust concentrations in air.

Labeling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008



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2.3 Hazards not otherwise classified (HNOC)

Health injuries are not known or expected under normal use.

3. Composition/information on ingredients

3.1 Substances

Common names : Zinc stearate; Zinc distearate CAS# 557-05-1

Chemical name : Zinc salt of C16 - C18 fatty acids

4. First aid measures

4.1 Description of first aid measures

If inhaled : Move to fresh air.

In case of skin contact : Wash off with plenty of water.

In case of eye contact : Rinse with plenty of water.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry chemical
Sand

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Smoke and fumes, toxic.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.



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6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.
Remove all sources of ignition.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Take precautionary measures against static discharges.
Keep away from sources of ignition - No smoking.
Avoid formation and buildup of dust.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store at room temperature in the original container.
Keep in a dry place.



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8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Components	Basis	Value	Note
Zinc stearate	ACGIH TLV	10 mg/m3	total dust
	OSHA PEL	15 mg/m3	total dust
	OSHA PEL	5 mg/m3	Respirable fraction
	NIOSH REL	5 mg/m3	Respirable fraction
	NIOSH REL	10 mg/m3	total dust
General limits for air contaminants (PNOC)	ACGIH TLV	10 mg/m3	total dust
	ACGIH TLV	3 mg/m3	Respirable fraction
	OSHA PEL	15 mg/m3	total dust
	OSHA PEL	5 mg/m3	Respirable fraction

8.2 Exposure controls

Engineering measures

Local exhaust

Personal protective equipment

- Respiratory protection : P1 filter respirator for inert particles
Necessary, in case of dust formation.
- Hand protection : protective gloves acc. to EN 374, e.g. neoprene
- Eye protection : Safety glasses
- Skin and body protection : Long sleeved clothing
- Hygiene measures : When using do not eat or drink.
Do not smoke.
Wash hands before breaks and at the end of workday.
Shower or bathe at the end of working.
Keep working clothes separately.
- Protective measures : Static dissipative shoes are recommended for use in environments that may not have sufficient ventilation and engineering controls to prevent incidental releases of airborne concentrations of the combustible dust to present an explosion hazard from static electrical discharge from personnel.

Environmental exposure controls

- General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.



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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	white powder
Odor	:	slight fatty odor
Odor Threshold	:	no data available
pH	:	7 - 9, 20 °C
Melting point/range	:	120 - 122 °C, Kofler Hot Bar (OECD 102)
Flash point	:	>> 100 °C
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Flammability or explosive limits	:	no data available
Upper	:	no data available
Lower (MEC)	:	35 g/mm ³
Vapor Pressure	:	no data available
Vapor Density	:	no data available
Density	:	1,10 g/cm ³ , OECD 109
Solubility	:	insoluble in water
Partition coefficient: n-octanol/water	:	POW: 1,2, OECD - Guideline 107
Auto-ignition temperature	:	>371 °C
Decomposition temperature	:	Stable under normal storage and handling temperatures
Viscosity	:	no data available
Molecular formula	:	Mixture derived from natural products
Molecular weight	:	615.4 (approximate)
Boiling point/boiling range	:	no data available

9.2 Other information

Conductivity : no data available

10. Stability and reactivity

10.1 Reactivity

Stable at normal ambient temperature and pressure.

10.2 Chemical stability

No decomposition if stored normally.



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10.3 Possibility of hazardous reactions

Hazardous reactions : Risk of dust explosion.

10.4 Conditions to avoid

Conditions to avoid : Avoid dust formation.
Sources of ignition

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if used as directed.

11. Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity : LD50: > 5.000 mg/kg, rat, OECD Test Guideline 401
: Read-across (Analogy)
: LD50: > 2.000 mg/kg, rat, OECD Test Guideline 423, Based on available data, the classification criteria are not met.

Acute inhalation toxicity : LC50: > 200 mg/l, 1 h, rat, dust/mist
: LC50: > 50 mg/l, 4 h, rat, dust/mist, Based on available data, the classification criteria are not met.

Acute dermal toxicity : LD50: ZBAER-Y20.00005574 2000 mg/kg bw, rabbit, Based on available data, the classification criteria are not met.

Skin corrosion/irritation : rabbit, Result: not irritating, OECD Test Guideline 404, Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation : rabbit, Result: not irritating, OECD Test Guideline 405, Based on available data, the classification criteria are not met.

Respiratory or skin sensitization : Skin sensitization, Patch test on human volunteers did not demonstrate sensitization properties., Based on available data, the classification criteria are not met.
: Respiratory sensitization, Based on available data, the classification criteria are not met.



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Germ cell mutagenicity

- Genotoxicity in vitro : Read-across (Analogy)
: Result: negative, standardized international/national methodology, Based on available data, the classification criteria are not met.
- Genotoxicity in vivo : Read-across (Analogy)
: standardized international/national methodology, Result: negative, Based on available data, the classification criteria are not met.
- Carcinogenicity : Read-across (Analogy)
: Based on available data, the classification criteria are not met.
- Reproductive toxicity : Read-across (Analogy)
: Based on available data, the classification criteria are not met.
- Teratogenicity : Read-across (Analogy)
: Based on available data, the classification criteria are not met.
- STOT - single exposure : Remarks: Read-across (Analogy)
: Remarks: Based on available data, the classification criteria are not met.
- STOT - repeated exposure : Read-across (Analogy)
- STOT - repeated exposure : Based on available data, the classification criteria are not met.
- Aspiration toxicity : Based on available data, the classification criteria are not met.

11.2 Other Information

- Likely route of exposure : Inhalation, Ingestion, Skin contact.
- Carcinogenicity : Not listed in the National Toxicology Program (NTP) Report on carcinogens, not found to be a potential carcinogen by the International Agency for Research on Cancer (IARC) nor by OSHA.
- Further information : CMR effects, Carcinogenicity, Mutagenicity, Reproductive toxicity, Hazard assessment, Category 1A, Category 1B, Based on available data, the classification criteria are not met.
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12. Ecological information

12.1 Toxicity

- Toxicity to fish : LC50: > 10.000 mg/l, 96 h, Danio rerio (zebra fish), semi-static test, Directive 67/548/EEC, Annex V, C.1.
- : Read-across (Analogy)
- : LC50: 0,169 mg Zn/l, 96 h, Oncorhynchus mykiss (rainbow trout), static test, standardised international/national methodology
- : Read-across (Analogy)
- : 0.330 - 0.780 mg Zn/l, Pimephales promelas (fathead minnow)
- Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202
- : Read-across (Analogy)
- : LC50: 0.147 - > 0,53 mg Zn/l, Ceriodaphnia dubia (water flea)
- Toxicity to algae : NOEC: 19,3 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), static test, OECD Test Guideline 201
- : EC50: > 100 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), semi-static test, OECD Test Guideline 201, GLP: yes, Value referred to the Water accumulated fraction (WAF).
- : EC10: 3,31 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), semi-static test, OECD Test Guideline 201, GLP: yes, Value referred to the Water accumulated fraction (WAF).
- Toxicity to bacteria : NOEC: 1.560 mg/l, 0,5 h, Photobacterium phosphoreum, static test, DIN 38412 T 34
- : Read-across (Analogy)
- : EC50: 5,2 mg Zn/l, 3 h, activated sludge, static test, OECD Test Guideline 209, GLP: no
- Toxicity to fish (Chronic toxicity) : Read-across (Analogy)
- NOEC: 0,044 - 0,530 mg Zn/L, Fresh water
- Read-across (Analogy)
- NOEC: 0,025 mg Zn/L, Marine water
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Read-across (Analogy)
- NOEC: 0,037 - 0,400 mg Zn/L, Fresh water
- Read-across (Analogy)
- NOEC: 0,0056 - 0,9 mg Zn/L, Marine water



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Ecotoxicology Assessment

Acute aquatic toxicity : Based on available data, the classification criteria are not met.

Chronic aquatic toxicity : Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Biodegradability : Ready biodegradability, 93 %, Result: Readily biodegradable.,
Exposure time: 28 d, closed bottle test according to OECD 301 D
: Read-across (Analogy)
: Ready biodegradability, 72 %, Result: Readily biodegradable.,
Exposure time: 29 d, OECD Test Guideline 301

12.3 Bioaccumulative potential

Bioaccumulation : not applicable

12.4 Mobility in soil

Mobility : According to experience not expected

12.5 Results of PBT and vPvB assessment

Assessment : Based on available data, the classification criteria are not met.

12.6 Other adverse effects

Further information : No information available.

13. Disposal considerations

13.1 Waste treatment methods

Product : Consult an expert on the disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Dispose in accordance with local, state and federal regulations.

Contaminated packaging : Empty containers must be handled with care due to product residue.



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14. Transport information

14.1 UN number : Not applicable
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.2 Proper shipping name
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.3 Transport hazard class
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.4 Packing group
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.5 Environmental hazards
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.6 Special precautions for user
See this safety data sheet chapter 6. - 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Remarks : No transport according to Annex II of MARPOL 73/78 and the IBC Code



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15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Section 313 Supplier Notification (USA)

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

Components	CAS-No.	wt [%]
Zinc stearate	557-05-1	100

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

15.3 Chemical Inventory

Europe	EINECS	:	listed
United States	TSCA	:	listed
Canada	DSL	:	listed
Australia	AICS	:	listed
Japan	ENCS	:	listed
Korea	KECL	:	listed
Philippines	PICCS	:	listed
China	IECSC	:	listed
New Zealand	NZIoC	:	listed
Taiwan	ECN	:	listed

16. Other information

16.1 HMIS Rating (USA)

Health	1
Flammability	1
Reactivity	1
Personal Protection	E

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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 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.