

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 10/31/2016 Revision: 10/31/2016

1 Identification

· Product identifier

· Trade name: Lutz Perfect Spike

· Product code: 30197

Recommended use and restriction on use

· Recommended use: Fertilizer

· Restrictions on use: Contact manufacturer/supplier

Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:

Lutz Corporation 208 North Parkside Road Normal, IL 61761

Tel.: 1-630-878-3746

· Emergency telephone number: 800-203-7740

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

- Label elements
- · GHS label elements Not regulated.
- · Hazard pictograms: Not regulated.
- Signal word: Not regulated.
- · Hazard statements: Not regulated.
- · Precautionary statements: Not regulated.

Other hazards

There are no other hazards not otherwise classified that have been identified.

0 % of the mixture consists of component(s) of unknown toxicity.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:			
10034-96-5	manganese (II) sulfate monohydrate	5-15%	
25322-68-3	polyethylene glycol	<10%	
	iron(II) sulfate	<10%	
	♦ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319		

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements refer to section 16.

Page: 1/9



acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 10/31/2016 Revision: 10/31/2016

Trade name: Lutz Perfect Spike

(Cont'd. of page 1)

Page: 2/9

4 First-aid measures

- Description of first aid measures
- · General information: Avoid breathing dust.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Wash with soap and water.
- After eye contact:

Rinse opened eye for several minutes under running water.

Remove contact lenses if worn.

Seek medical treatment in case of complaints.

· After swallowing:

Unlikely route of exposure.

Rinse mouth with water. Do not induce vomiting. Get medical attention.

Most important symptoms and effects, both acute and delayed:

Headache

Coughing

Slight irritant effect on eyes.

May be harmful if swallowed.

· Indication of any immediate medical attention and special treatment needed:

No relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:

The product is not flammable.

Use fire fighting measures that suit the environment.

- For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Avoid formation of dust.

Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Methods and material for containment and cleaning up

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

(Cont'd. on page 3)





acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 10/31/2016 Revision: 10/31/2016

Trade name: Lutz Perfect Spike

(Cont'd. of page 2)

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- Handling
- · Precautions for safe handling:

Use only in well ventilated areas.

Prevent formation of dust.

Any deposit of dust which cannot be avoided must be regularly removed.

Information about protection against explosions and fires:

Keep respiratory protective device available.

- Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles:

Store in a well-ventilated place. Keep cool.

Protect from humidity and water.

Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.

Store away from foodstuffs.

- Further information about storage conditions: None.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:				
10034-96-5 manganese (II) sulfate monohydrate				
PEL (USA)	Ceiling limit value: 5 mg/m³ as Mn			
REL (USA)	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³ as Mn			
TLV (USA)	Long-term value: 0.02* 0.1* mg/m³ as Mn; *respirable **inhalable fraction			
EL (Canada)	Long-term value: 0.2 mg/m³ as Mn; R			
LMPE (Mexico)	Long-term value: 0.2 mg/m³ como Mn			
25322-68-3 poly	yethylene glycol			
WEEL (USA)	Long-term value: 10 mg/m³ (H); MW>200			
	(Cont'd. on page 4)			





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Printing date: 10/31/2016 Revision: 10/31/2016

Trade name: Lutz Perfect Spike

	(Cont	d. of page 3)	
7720-78-7 iron(7720-78-7 iron(II) sulfate		
REL (USA)	Long-term value: 1 mg/m³ as Fe		
TLV (USA)	Long-term value: 1 mg/m³ as Fe		
EL (Canada)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³ as Fe		
LMPE (Mexico)	Long-term value: 1 mg/m³ como Fe		

- Exposure controls
- · Engineering measures Provide adequate ventilation.
- Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Avoid breathing dust.

Wash hands before breaks and at the end of work.

- · Engineering controls: No relevant information available.
- Breathing equipment:

Not required under normal conditions of use.

Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded.

- **Protection of hands:** Gloves are advised for repeated or prolonged contact.
- · Material of gloves Rubber gloves
- · Eve protection:

Follow relevant national guidelines concerning the use of protective eyewear.



Safety glasses

- · Body protection: Not required under normal conditions of use.
- Limitation and supervision of exposure into the environment

Avoid release to the environment.

Risk management measures

Do not smoke, eat, or drink while using the product. Wash hands with soap and water before eating, drinking, smoking, or using toilet facilities.

9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance:

Form:

Solid

Color:

Brown

· Odor:

Odorless

(Cont'd. on page 5)



acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 10/31/2016 Revision: 10/31/2016

Trade name: Lutz Perfect Spike

		(Cont'd. of page
· Odor threshold:	Not determined.	
· pH-value:	Not applicable.	
· Melting point/Melting range:	Not determined.	
· Boiling point/Boiling range:	Not determined.	
· Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not determined.	
· Auto-ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
· Oxidizing properties:	Not determined.	
· Vapor pressure:	Not determined.	
Density:		
Relative density:	2.8 g/cm³ (23.366 lbs/gal)	
Vapor density:	Not applicable.	
Evaporation rate:	Not applicable.	
· Solubility in / Miscibility with		
Water:	Soluble.	
· Partition coefficient (n-octanol/water): Not determined.		
· Viscosity		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Other information	No relevant information available.	

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

Reacts with strong acids and alkali.

Reacts with oxidizing agents.

Conditions to avoid

Prevent formation of dust.

Avoid acids.

Store away from oxidizing agents.

(Cont'd. on page 6)

Page: 5/9



acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 10/31/2016 Revision: 10/31/2016

Trade name: Lutz Perfect Spike

· Incompatible materials Oxidizers, strong bases, strong acids

· Hazardous decomposition products

Carbon monoxide and carbon dioxide

Sulfur oxides (SOx)

Phosphorus oxides (e.g. P2O5)

Toxic metal oxide smoke

(Cont'd. of page 5)

Page: 6/9

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Slight irritant effect on eyes.
- · Sensitization: No sensitizing effects known.
- IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

Inhalation.

Eve contact.

Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): May be harmful if swallowed.
- · Repeated dose toxicity: Long term inhalation of product dust may be harmful.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
- · Aquatic toxicity No relevant information available.
- Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No relevant information available.

(Cont'd. on page 7)



acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 10/31/2016 Revision: 10/31/2016

Trade name: Lutz Perfect Spike

(Cont'd. of page 6)

Page: 7/9

Additional ecological information

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
- Recommendation: Disposal must be made according to official regulations.

4 Transport information		
· UN-Number · DOT, ADR, IMDG, IATA	Not regulated.	
UN proper shipping name DOT, ADR, IMDG, IATA	Not regulated.	
Transport hazard class(es)		
· DOT, ADR, IMDG, IATA · Class	Not regulated.	
Packing group DOT, ADR, IMDG, IATA	Not regulated.	
Environmental hazards Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	II of Not applicable.	

(Cont'd. on page 8)



acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 10/31/2016 Revision: 10/31/2016

Trade name: Lutz Perfect Spike

(Cont'd. of page 7)

Page: 8/9

15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture · United States (USA) ·SARA Section 302 (extremely hazardous substances): None of the ingredients are listed. Section 355 (extremely hazardous substances): 7720-78-7 iron(II) sulfate Section 313 (Specific toxic chemical listings): 7783-20-2 ammonium sulphate 10034-96-5 manganese (II) sulfate monohydrate TSCA (Toxic Substances Control Act) All ingredients are listed. Proposition 65 (California) · Chemicals known to cause cancer: None of the ingredients are listed. Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed. Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed. Chemicals known to cause developmental toxicity: None of the ingredients are listed. Carcinogenic categories EPA (Environmental Protection Agency): 10034-96-5 manganese (II) sulfate monohydrate D · IARC (International Agency for Research on Cancer): None of the ingredients are listed. NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients are listed. Canadian Domestic Substances List (DSL): All ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

· Date of preparation / last revision 10/31/2016 / -

(Cont'd. on page 9)



acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

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Trade name: Lutz Perfect Spike

(Cont'd. of page 8)

Page: 9/9

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health LDLo: Lowest Lethal Dose Observed Acute Tox. 4: Acute toxicity – Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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