

Printing date: 10/31/2016

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· Product identifier	
 Trade name: Lutz Ultra Spike Product code: 30199 	
 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	
Normal, IL 61761	
Normal, IL 61761 Tel.: 1-630-878-3746	
Normal, IL 61761 Tel.: 1-630-878-3746 • Emergency telephone number: 800-203-7740	Globally Harmonized System (GHS).
Normal, IL 61761 Tel.: 1-630-878-3746 • Emergency telephone number: 800-203-7740 2 Hazard(s) identification • Classification of the substance or mixture	Globally Harmonized System (GHS).

① Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319 25322-68-3 polyethylene glycol 7720-78-7 iron(II) sulfate ① Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	10004-00-0	manganese (II) sulfate monohydrate	5-10%
25322-68-3 polyethylene glycol <5%	7758-98-7		<5%
7720-78-7 iron(II) sulfate <5%		1 Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
① Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319 1303-96-4 disodium tetraborate, decahydrate ③ Repr. 1B, H360 <1%	25322-68-3	polyethylene glycol	<5%
1303-96-4 disodium tetraborate, decahydrate <1%	7720-78-7		<5%
🗞 Repr. 1B, H360		1 Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
	1303-96-4	disodium tetraborate, decahydrate	<1%
Additional information:		🗞 Repr. 1B, H360	
	Additional i	nformation:	•



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For the wording of the listed Hazard Statements refer to section 16.

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: No relevant information available.
- 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 No relevant information available.
- 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 to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up

Pick up mechanically.

Dispose unusable material as waste according to item 13.

[·] Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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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.

· Information about protection against explosions and fires: No special measures required.

· 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.
- Specific end use(s) No relevant information available.

B Exposure controls/personal protection		
Control paran	neters	
· Components w	ith limit values that require monitoring at the workplace:	
10034-96-5 mai	nganese (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	
7720-78-7 iron(II) sulfate	
REL (USA)	Long-term value: 1 mg/m³ as Fe	
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TLV (USA)	Long-term value: 1 mg/m ³ as Fe	
EL (Canada)	Short-term value: 2 mg/m ³	
	Long-term value: 1 mg/m³ as Fe	
LMPE (Mexico)	Long-term value: 1 mg/m³ como Fe	
1303-96-4 diso	dium tetraborate, decahydrate	
REL (USA)	Long-term value: 5 mg/m ³	
TLV (USA)	Short-term value: 6* mg/m³ Long-term value: 2* mg/m³ *as inhalable fraction	
EL (Canada)	Short-term value: 6 mg/m³ Long-term value: 2 mg/m³	
EV (Canada)	Short-term value: 6 mg/m³ Long-term value: 2 mg/m³ inorganic, inhalable	
LMPE (Mexico)	Short-term value: 6* mg/m³ Long-term value: 2* mg/m³ A4, *fracción inhalable	
	ntrols	
Personal prote General prote The usual preca Keep away from Avoid breathing Wash hands be Engineering co Breathing equi Not required un Use suitable res Protection of h Eye protection	easures Provide adequate ventilation. ective equipment: etive and hygienic measures: autionary measures for handling chemicals should be followed. In foodstuffs, beverages and feed. dust. efore breaks and at the end of work. ontrols: No relevant information available. ipment: der normal conditions of use. spiratory protective device in case of insufficient ventilation. hands: Rubber gloves	
Personal prote General protect The usual procetor Keep away from Avoid breathing Wash hands be Engineering co Breathing equi Not required un Use suitable res Protection of h Eye protection Follow relevant	easures Provide adequate ventilation. ective equipment: etive and hygienic measures: autionary measures for handling chemicals should be followed. In foodstuffs, beverages and feed. dust. efore breaks and at the end of work. ontrols: No relevant information available. ipment: der normal conditions of use. spiratory protective device in case of insufficient ventilation. hands: Rubber gloves :	
Personal prote General protect The usual protect Keep away from Avoid breathing Wash hands be Engineering co Breathing equi Not required un Use suitable res Protection of h Eye protection Follow relevant Safety Body protection	easures Provide adequate ventilation. ective equipment: etive and hygienic measures: autionary measures for handling chemicals should be followed. n foodstuffs, beverages and feed. dust. efore breaks and at the end of work. pontrols: No relevant information available. ipment: der normal conditions of use. spiratory protective device in case of insufficient ventilation. hands: Rubber gloves : national guidelines concerning the use of protective eyewear.	

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[·] 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: Color:	Solid Light brown		
	Odorless		
· 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 at 20 °C (68 °F):	2.8 g/cm ³ (23.366 lbs/gal)		
Relative density:	Not determined.		
· Vapor density:	Not applicable.		
 Evaporation rate: 	Not applicable.		
· Solubility in / Miscibility with			
Water:	Soluble.		
· Partition coefficient (n-octanol/wat	ter): Not determined.		
· Viscosity			
Dynamic:	Not applicable.		
Kinematic:	Not applicable.		
[·] Other information	No relevant information available.		

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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.

· Conditions to avoid Prevent formation of dust.

· **Incompatible materials** Oxidizing agents

• Hazardous decomposition products Danger of toxic pyrolysis products.

11 Toxicological information

[·] Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

7758-98-7 copper sulphate

Oral LD50 300 mg/kg (rat)

Primary irritant effect:

· On the skin: Based on available data, the classification criteria are not met.

• On the eye: Based on available data, the classification criteria are not met.

· 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.

Eye contact.

Skin contact.

- Acute effects (acute toxicity, irritation and corrosivity): None.
- · Repeated dose toxicity: None.
- $^{\, \rm c}$ 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.

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· Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- [·] Toxicity
- · Aquatic toxicity Toxic for aquatic organisms
- Persistence and degradability No relevant information available.
- · **Bioaccumulative potential:** No relevant information available.
- · Mobility in soil: No relevant information available.
- · Additional ecological information
- · General notes:

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

Also poisonous for fish and plankton in water bodies.

- [•] 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.

• Recommended cleansing agent: Water, if necessary with cleansing agents.

[·] UN-Number	
· DOT	Not regulated.
· ADR, IMDG, IATA	UN3077
· UN proper shipping name	
DOT	Not regulated.
ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE
	SOLID, N.O.S. (copper sulphate, zinc sulphate)
·IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE
	SOLID, N.O.S. (copper sulphate, zinc sulphate
	MARINE POLLUTANT



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ΙΑΤΑ	Environmentally hazardous substance, solid, n.o (copper sulphate, zinc sulphate)
Transport hazard class(es)	
DOT	
Class	Not regulated.
ADR	
Class	9 (M7) Miscellaneous dangerous substances an articles
IMDG, IATA	
Class	9 Miscellaneous dangerous substances and articles
Packing group	
DOT ADR, IMDG, IATA	Not regulated. III
	111
Environmental hazards Marine pollutant:	Yes Symbol (fish and tree)
Special precautions for user	Warning: Miscellaneous dangerous substances a articles
Danger code (Kemler): EMS Number:	90 F-A,S-F
Transport in bulk according to Annex	ll of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not regulated when carried in single or combination packaging containing a net quantity of 5L or less for liquids or 5 kg or less for solids per the following: DOT: 171.4(c)(2) ADR: SP 375 IMDG: 2.10.2.7 IATA: special provision A197

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mixture	health and environmental regulations/legislation specific for the s tates (USA)	ubstance
Section 3	355 (extremely hazardous substances):	
7720-78-7	7 iron(II) sulfate	
Section 3 Substanc	313 (Specific toxic chemical listings): e / component not listed individually, but listed under family group as Zinc salts.	
	-2 ammonium sulphate	
10034-96	-5 manganese (II) sulfate monohydrate	
7758-98	-7 copper sulphate	
TSCA (To	oxic Substances Control Act)	
All ingred	ients are listed.	
Proposit	ion 65 (California)	
Chemica	Is known to cause cancer:	
None of t	he ingredients are listed.	
Chemica	Is known to cause reproductive toxicity for females:	
None of t	he ingredients are listed.	
Chemica	Is known to cause reproductive toxicity for males:	
None of t	he ingredients are listed.	
Chemica	Is known to cause developmental toxicity:	
None of t	he ingredients are listed.	
Carcinog	jenic categories	
EPA (Env	vironmental Protection Agency):	
10034-96	-5 manganese (II) sulfate monohydrate	D
	-4 disodium tetraborate, decahydrate	l (ora
7733-02	-0 zinc sulphate (anhydrous)	D, I,
IARC (Int	ernational Agency for Research on Cancer):	
None of t	he ingredients are listed.	
NIOSH-C	a (National Institute for Occupational Safety and Health):	
None of t	he ingredients are listed.	
Canadiar	n Domestic Substances List (DSL):	
All inared	ients are listed.	

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	This information is based on our present knowledge. However, this shall not constitute a guarantee for a specific product features and shall not establish a legally valid contractual relationship.
D	Date of preparation / last revision 10/31/2016 / -
	Abbreviations and acronyms: DR: European Agreement concerning the International Carriage of Dangerous Goods by Road MDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation ATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) C50: Lethal concentration, 50 percent D50: Lethal concentration, 50 percent D50: Lethal concentration, 50 percent D50: Lethal concentration, 50 percent PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern PVB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety DSHA: Occupational Safety & Health Acute Tox. 4: Acute toxicity – Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 22 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A Repr. 1B: Reproductive toxicity – Category 1B Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/hor 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., ISF 278-0-07-176923-5. Safety Data Sheets, Individual Manufacturers
S C	SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue
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