

Simplot Grower Solutions 8-20-5 +5(S) 0.5(Zn)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Simplot Grower Solutions 8-20-5 +5(S) 0.5(Zn)
Product code : M12139

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

No additional information available

1.3. Details of the supplier of the safety data sheet

JR Simplot Company
P.O. Box 70013
Boise, ID 83707
T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2 H315 - Causes skin irritation
Eye Irrit. 2B H320 - Causes eye irritation
STOT SE 3 H335 - May cause respiratory irritation

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H320 - Causes eye irritation
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P264 - Wash ... thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 - If on skin: Wash with plenty of water/...
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a poison center/doctor/... if you feel unwell
P321 - Specific treatment (see ... on this label)
P332+P313 - If skin irritation occurs: Get medical attention
P337+P313 - If eye irritation persists: Get medical attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to ...in accordance with local/regional/national regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5		Not classified
Ammonium Polyphosphate	(CAS No) 68333-79-9		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
ammonium thiosulfate	(CAS No) 7783-18-8		Not classified
potassium chloride	(CAS No) 7447-40-7		Not classified
ammonium sulfate (7783-20-2)	(CAS No) 7783-20-2		Not classified
ammonium sulfite	(CAS No) 10196-04-0		Not classified
Chelated Zinc			Not classified
ammonia, 10%<=conc<25%, aqueous solutions	(CAS No) 1336-21-6		Skin Corr. 1B, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label).
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

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6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash ... thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ammonia, 10%≤conc<25%, aqueous solutions (1336-21-6)		
ACGIH	ACGIH TWA (ppm)	25 ppm
ACGIH	ACGIH STEL (ppm)	25 ppm

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Mixture contains one or more component(s) which have the following colour(s):
White Colourless Colourless-white Colourless to white Unpurified: grey-brown

Odour : There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
Mixture contains one or more component(s) which have the following odour(s):
No data available on odour Irritating/pungent odour Ammonia odour Mild odour Odourless

Odour threshold : No data available

pH : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Relative evaporation rate (butylacetate=1) : No data available

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Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available
Solubility	: Water: Solubility in water of component(s) of the mixture : • Ammonium Polyphosphate: < 15 g/100ml • ammonium thiosulfate: > 80 g/100ml • ammonium sulfite: 64.2 g/100ml (25 °C) • ammonium sulfate (7783-20-2): 77 g/100ml • potassium chloride: 34 g/100ml • ammonia, 10%<=conc<25%, aqueous solutions: Complete
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Ammonium Polyphosphate (68333-79-9)	
LD50 oral rat	5625 mg/kg (Rat)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit)
ATE US (oral)	5625.000 mg/kg bodyweight
ammonium thiosulfate (7783-18-8)	
LD50 oral rat	> 2000 mg/kg bodyweight (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Read-across)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit; Read-across; Equivalent or similar to OECD 402)
ammonium sulfite (10196-04-0)	
LD50 oral rat	2610 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Read-across)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
LC50 inhalation rat (mg/l)	> 5.5 mg/l/4h (Rat; Read-across)
ATE US (oral)	2610.000 mg/kg bodyweight
potassium chloride (7447-40-7)	
LD50 oral rat	2600 mg/kg (Rat)

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potassium chloride (7447-40-7)	
ATE US (oral)	2600.000 mg/kg bodyweight
ammonium sulfate (7783-20-2) (7783-20-2)	
LD50 oral rat	2840 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	2840.000 mg/kg bodyweight

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

ammonium thiosulfate (7783-18-8)	
LC50 fish 1	265 mg/l (96 h; Pisces; Nominal concentration)
EC50 Daphnia 1	230 mg/l (48 h; Daphnia magna; Nominal concentration)
LC50 fish 2	510 mg/l (96 h; Lepomis macrochirus)
TLM fish 1	> 200 mg/l (48 h; Poecilia reticulata; Nocivity test)
Threshold limit algae 1	> 100 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
ammonium sulfite (10196-04-0)	
LC50 fish 1	177.8 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)
LC50 other aquatic organisms 1	203 mg/l (100 h; Daphnia magna)
EC50 Daphnia 1	89 mg/l (48 h; Daphnia magna; Nominal concentration)
TLM fish 1	240 ppm (48 h; Gambusia affinis)
TLM other aquatic organisms 1	299 mg/l (25 h; Daphnia magna)
Threshold limit other aquatic organisms 1	203 mg/l (100 h; Daphnia magna)
Threshold limit algae 1	63 - 126,96 h; Algae; Nominal concentration
Threshold limit algae 2	37.8 mg/l (96 h; Algae; Growth rate)
potassium chloride (7447-40-7)	
LC50 fish 1	920 mg/l (96 h; Gambusia affinis; Static system)
EC50 Daphnia 1	630 mg/l (48 h; Ceriodaphnia dubia)
LC50 fish 2	2010 mg/l (96 h; Lepomis macrochirus; Static system)
EC50 Daphnia 2	660 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	850 mg/l (72 h; Scenedesmus subspicatus)
Threshold limit algae 2	> 100 mg/l (72 h; Scenedesmus subspicatus; GLP)
ammonium sulfate (7783-20-2) (7783-20-2)	
LC50 fish 1	126 mg/l (96 h; Poecilia reticulata)

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ammonium sulfate (7783-20-2) (7783-20-2)	
EC50 Daphnia 1	202 mg/l (96 h; Daphnia magna)
LC50 fish 2	250 - 480 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 2	433 mg/l (50 h; Daphnia magna)
TLM fish 1	1290 ppm (96 h; Gambusia affinis)

12.2. Persistence and degradability

Simplot Grower Solutions 8-20-5 +5(S) 0.5(Zn)	
Persistence and degradability	Not established.

Ammonium Polyphosphate (68333-79-9)	
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the components available. Not established.

Water (7732-18-5)	
Persistence and degradability	Not established.

ammonium thiosulfate (7783-18-8)	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance available. Not established.
Biochemical oxygen demand (BOD)	0.62 g O ₂ /g substance

ammonium sulfite (10196-04-0)	
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the substance available.

potassium chloride (7447-40-7)	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

ammonium sulfate (7783-20-2) (7783-20-2)	
Persistence and degradability	Biodegradability in water: no data available. Not established.

ammonia, 10%≤conc<25%, aqueous solutions (1336-21-6)	
Persistence and degradability	Readily biodegradable in water. Ozonation in water. Biodegradable in the soil. No (test)data on mobility of the components available. Ozonation in the air. Not established.

Chelated Zinc	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Simplot Grower Solutions 8-20-5 +5(S) 0.5(Zn)	
Bioaccumulative potential	Not established.

Ammonium Polyphosphate (68333-79-9)	
Bioaccumulative potential	No bioaccumulation data available. Not established.

Water (7732-18-5)	
Bioaccumulative potential	Not established.

ammonium thiosulfate (7783-18-8)	
Bioaccumulative potential	Not bioaccumulative. Not established.

ammonium sulfite (10196-04-0)	
Bioaccumulative potential	Not bioaccumulative.

potassium chloride (7447-40-7)	
Log Pow	-0.46 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

ammonium sulfate (7783-20-2) (7783-20-2)	
Log Pow	-5.1
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

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ammonia, 10%<=conc<25%, aqueous solutions (1336-21-6)	
Log Pow	-1.14
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
Chelated Zinc	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Chemical	CAS No	%
Chelated Zinc		

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

ammonia, 10%<=conc<25%, aqueous solutions	CAS No 1336-21-6	%
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ammonium sulfite (10196-04-0)

Not subject to reporting requirements of the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
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ammonia, 10%<=conc<25%, aqueous solutions (1336-21-6)

Subject to reporting requirements of United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
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15.2. International regulations

CANADA

No additional information available

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EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

ammonium sulfite (10196-04-0)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

ammonia, 10%<=conc<25%, aqueous solutions (1336-21-6)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : None.

Full text of H-statements:

Eye Irrit. 2B	Serious eye damage/eye irritation, Category 2B
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

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