

# Simplot Partners SSN 23-0-16 Slow Release (N) with Micros Custom Blend for Majestic Farms

## 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 Partners SSN 23-0-16 Slow Release (N) with Micros Custom Blend for Majestic Farms  
Product code : M26976

#### 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

Serious eye damage/eye irritation, Category 2A H319

Reproductive toxicity, Category 2 H361

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) : Warning

Contains : disodium tetraborate, pentahydrate

Hazard statements (GHS-US) : H319 - Causes serious eye irritation  
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P264 - Wash hands, forearms and face thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308+P313 - If exposed or concerned: Get medical attention  
P337+P313 - If eye irritation persists: Get medical attention  
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

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

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Name	Product identifier	%	GHS-US classification
iron(II)sulfate	(CAS No) 7720-78-7		Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315
disodium tetraborate, pentahydrate	(CAS No) 12179-04-3		Eye Irrit. 2A, H319 Repr. 2, H361
zinc sulfate	(CAS No) 7733-02-0		Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Proprietary			Not classified

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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 exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Allow breathing of fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- 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 : Suspected of damaging fertility or the unborn child.
- Symptoms/injuries after eye contact : Causes serious 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.

#### 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.

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### 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Hygiene measures : Wash hands, forearms and face 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 closed when not in use.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Proprietary		
Not applicable		
iron(II)sulfate (7720-78-7)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Not applicable		
disodium tetraborate, pentahydrate (12179-04-3)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
zinc sulfate (7733-02-0)		
Not applicable		

#### 8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- 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 : Solid
- Appearance : Granules.
- Colour : Mixture contains one or more component(s) which have the following colour(s): Colourless to white Colourless White to light grey White pink Gray Pure substance: white On exposure to air: turns yellow-brown Commercial substance: blue-green
- 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):  
Odourless In moist air: Ammonia odour
- 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

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Relative evaporation rate (butylacetate=1)	: No data available
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 : • potassium sulfate: 11 g/100ml • diatomaceous earth: insoluble • urea (57-13-6): 100 g/100ml • sodium chloride: 31.7 g/100ml (20 °C) • iron(II)sulfate: 26 g/100ml • disodium tetraborate, pentahydrate: 3.6 g/100ml • zinc sulfate: > 54 g/100ml
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

<b>iron(II)sulfate (7720-78-7)</b>	
LD50 oral rat	319 mg/kg (Rat; Literature)
ATE US (oral)	319.000 mg/kg bodyweight
<b>disodium tetraborate, pentahydrate (12179-04-3)</b>	
LD50 oral rat	> 2000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2500 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Experimental value; Other)
<b>zinc sulfate (7733-02-0)</b>	
LD50 oral rat	1000 - 2000 mg/kg (Rat)
ATE US (oral)	1000.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye irritation.

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Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Not classified
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 eye contact	: Causes serious eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>iron(II)sulfate (7720-78-7)</b>	
LC50 fish 1	925 mg/l (96 h; Poecilia reticulata; Heptahydrate)
EC50 Daphnia 1	7.2 mg/l (48 h; Daphnia magna; Metal ion)
LC50 fish 2	100 mg/l (96 h; Oryzias latipes; GLP)
EC50 Daphnia 2	152 mg/l (48 h; Daphnia magna; Heptahydrate)
Threshold limit algae 1	130 mg/l (72 h; Pseudokirchneriella subcapitata; Heptahydrate)
Threshold limit algae 2	3.2 mg/l (72 h; Pseudokirchneriella subcapitata; Heptahydrate)
<b>disodium tetraborate, pentahydrate (12179-04-3)</b>	
LC50 fish 1	100 - 1000 mg/l (96 h; Pisces; Decahydrate)
LC50 other aquatic organisms 1	100 - 100 mg/l (96 h)
EC50 Daphnia 1	340 mg/l (24 h; Daphnia magna; Anhydrous form)
LC50 fish 2	1900 mg/l (Pimephales promelas)
TLM fish 1	8200 ppm (48 h; Gambusia affinis; Anhydrous form)
Threshold limit other aquatic organisms 1	100 - 100,96 h; Protozoa; Anhydrous form
Threshold limit other aquatic organisms 2	1 mg/l (72 h)
Threshold limit algae 1	47 mg/l (96 h; Scenedesmus subspicatus; Anhydrous form)
Threshold limit algae 2	0.58 mg/l (Scenedesmus quadricauda; Anhydrous form)
<b>zinc sulfate (7733-02-0)</b>	
LC50 fish 1	1.7 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 1	1 mg/l (24 h; Daphnia magna)
LC50 fish 2	2.4 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	0.56 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	136 µg/l (72 h; Selenastrum capricornutum; Growth rate)
Threshold limit algae 2	24 µg/l (3 days; Selenastrum capricornutum; Growth rate)

### 12.2. Persistence and degradability

<b>Simplot Partners SSN 23-0-16 Slow Release (N) with Micros Custom Blend for Majestic Farms</b>	
Persistence and degradability	Not established.
<b>Proprietary</b>	
Persistence and degradability	Not established.
<b>iron(II)sulfate (7720-78-7)</b>	
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the substance available. Not established.
<b>disodium tetraborate, pentahydrate (12179-04-3)</b>	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. Adsorbs into the soil. Not established.

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<b>disodium tetraborate, pentahydrate (12179-04-3)</b>	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

<b>zinc sulfate (7733-02-0)</b>	
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

### 12.3. Bioaccumulative potential

<b>Simplot Partners SSN 23-0-16 Slow Release (N) with Micros Custom Blend for Majestic Farms</b>	
Bioaccumulative potential	Not established.

<b>Proprietary</b>	
Bioaccumulative potential	Not established.

<b>iron(II)sulfate (7720-78-7)</b>	
BCF fish 1	2 - 20 (28 days; Cyprinus carpio; Heptahydrate)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500). Not established.

<b>disodium tetraborate, pentahydrate (12179-04-3)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.

<b>zinc sulfate (7733-02-0)</b>	
BCF fish 1	59 - 242 (Cyprinus carpio; Test duration: 8 weeks)
Bioaccumulative potential	Bioaccumable. Not established.

### 12.4. Mobility in soil

<b>disodium tetraborate, pentahydrate (12179-04-3)</b>	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

### 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. Dispose of contents/container to ..

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

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### 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:

Proprietary	CAS No	%
disodium tetraborate, pentahydrate	CAS No 12179-04-3	%

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.

zinc sulfate	CAS No 7733-02-0	%
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#### iron(II)sulfate (7720-78-7)

CERCLA RQ	1000 lb
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#### zinc sulfate (7733-02-0)

CERCLA RQ	1000 lb
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### 15.2. International regulations

#### CANADA

No additional information available

#### 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

#### iron(II)sulfate (7720-78-7)

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

#### zinc sulfate (7733-02-0)

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

## SECTION 16: Other information

Other information : None.

Full text of H-statements:

H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H361	Suspected of damaging fertility or the unborn child

SDS US (GHS HazCom 2012)

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