

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

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 3-18-18 Liquid Fertilizer
Product code : M12310

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

Acute toxicity (oral), H302
Category 4
Skin corrosion/irritation, H315
Category 2

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
Contains : potassium hydroxide
Hazard statements (GHS-US) : H302 - Harmful if swallowed
H315 - Causes skin irritation
Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+P312 - If swallowed: Call a poison center/doctor/... if you feel unwell
P302+P352 - If on skin: Wash with plenty of water/...
P321 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth
P332+P313 - If skin irritation occurs: Get medical attention
P362+P364 - Take off contaminated clothing and wash it before reuse
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

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

Safety Data Sheet

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

Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5		Not classified
phosphoric acid	(CAS No) 7664-38-2		Met. Corr. 1, H290 Skin Corr. 1B, H314
potassium hydroxide	(CAS No) 1310-58-3		Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
urea (57-13-6)	(CAS No) 57-13-6		Eye Irrit. 2B, H320
ammonia, 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 : Allow breathing of fresh air. Allow the victim to rest.
- 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 supplemental first aid instruction on this label).
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

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

- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

Safety Data Sheet

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

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.
- Hygiene measures : Do not eat, drink or smoke when using this product. 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

phosphoric acid (7664-38-2)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
ACGIH	ACGIH STEL (mg/m ³)	3 mg/m ³
potassium hydroxide (1310-58-3)		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
ammonia, aqueous solutions (1336-21-6)		
ACGIH	ACGIH TWA (ppm)	25 ppm
ACGIH	ACGIH STEL (ppm)	25 ppm
Water (7732-18-5)		
Not applicable		
urea (57-13-6) (57-13-6)		
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.
- 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
- Appearance : Clear, colorless liquid.
- Colour : Clear Solution
- Odour : Nearly odorless Mild ammonia odor
- Odour threshold : No data available
- pH : 7.4 - 7.8
- Melting point : No data available
- Freezing point : No data available
- Boiling point : 94 °C
- Flash point : Non-flammable
- Relative evaporation rate (butylacetate=1) : No data available
- Flammability (solid, gas) : No data available

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

Safety Data Sheet

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

Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: 1.42
Relative vapour density at 20 °C	: ≈
Density	: 11.8 lbs/gal
Solubility	: Complete. Water: Solubility in water of component(s) of the mixture : • phosphoric acid: Complete • potassium hydroxide: 121 g/100ml (25 °C) • ammonia, aqueous solutions: Complete • urea (57-13-6): 100 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

Stable. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Extremely high temperatures. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Water-reactive materials. Strong acids. Strong bases.

10.6. Hazardous decomposition products

During high temperature in fire conditions. The product may reach melting point and decompose to release NH₃, SO_x, PO_x, or CN. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Simplot Grower Solutions 3-18-18 Liquid Fertilizer	
ATE US (oral)	1556.075 mg/kg bodyweight
phosphoric acid (7664-38-2)	
LD50 oral rat	(Rat)
potassium hydroxide (1310-58-3)	
LD50 oral rat	333 mg/kg (Rat)
ATE US (oral)	333.000 mg/kg bodyweight
urea (57-13-6) (57-13-6)	
LD50 oral rat	8471 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 14300 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 3200 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 21000 mg/kg (Rabbit; Literature study)
ATE US (oral)	8471.000 mg/kg bodyweight

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

Safety Data Sheet

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

Skin corrosion/irritation	: Causes skin irritation. pH: 7.4 - 7.8
Serious eye damage/irritation	: Not classified pH: 7.4 - 7.8
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
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. Harmful if swallowed.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

phosphoric acid (7664-38-2)	
LC50 fish 1	138 mg/l (96 h; Pisces; Pure substance)
LC50 other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)
LC50 fish 2	100 - 1000 mg/l (Pisces; Pure substance)
LC50 other aquatic organisms 2	100 - 1000 mg/l (Pure substance)
TLM fish 1	138 ppm (24 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)
Threshold limit other aquatic organisms 2	100 - 1000, Pure substance
potassium hydroxide (1310-58-3)	
LC50 fish 1	28.6 mg/l (24 h; Pisces; Pure substance)
LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h)
LC50 fish 2	80 mg/l (96 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	100 - 1000, 96 h
urea (57-13-6) (57-13-6)	
LC50 fish 1	> 6810 mg/l (96 h; Leuciscus idus; Nominal concentration)
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna; Nominal concentration)
LC50 fish 2	17500 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 2	> 10000 mg/l (24 h; Daphnia magna)
TLM fish 1	17500 ppm (96 h; Poecilia reticulata)
Threshold limit other aquatic organisms 1	120000 mg/l (16 h; Bacteria; Toxicity test)
Threshold limit other aquatic organisms 2	> 10000 mg/l (Pseudomonas putida)
Threshold limit algae 1	> 10000 mg/l (168 h; Scenedesmus quadricauda; Growth rate)
Threshold limit algae 2	47 mg/l (192 h; Microcystis aeruginosa; Growth rate)

12.2. Persistence and degradability

Simplot Grower Solutions 3-18-18 Liquid Fertilizer	
Persistence and degradability	Not established.
phosphoric acid (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the components available. Not established.

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

Safety Data Sheet

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

phosphoric acid (7664-38-2)	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
potassium hydroxide (1310-58-3)	
Persistence and degradability	Biodegradability: not applicable. Low potential for adsorption in soil. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
ammonia, 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.
Water (7732-18-5)	
Persistence and degradability	Not established.
urea (57-13-6) (57-13-6)	
Persistence and degradability	Inherently biodegradable. Hydrolysis in water. Not established.
ThOD	0.27 g O ₂ /g substance

12.3. Bioaccumulative potential

Simplot Grower Solutions 3-18-18 Liquid Fertilizer	
Bioaccumulative potential	Not established.
phosphoric acid (7664-38-2)	
Log Pow	-0.77 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
potassium hydroxide (1310-58-3)	
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
ammonia, aqueous solutions (1336-21-6)	
Log Pow	-1.14
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
Water (7732-18-5)	
Bioaccumulative potential	Not established.
urea (57-13-6) (57-13-6)	
BCF fish 1	1 (72 h; Brachydanio rerio; Fresh water)
BCF other aquatic organisms 1	11700 (Chlorella sp.)
Log Pow	< -1.73 (Experimental value; EU Method A.8: Partition Coefficient)
Bioaccumulative potential	Bioaccumulation: not applicable. 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. Dispose of contents/container to ..

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

Safety Data Sheet

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

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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

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.

	CAS No	%
ammonia, aqueous solutions	1336-21-6	
phosphoric acid (7664-38-2)		
CERCLA RQ		5000 lb
potassium hydroxide (1310-58-3)		
CERCLA RQ		1000 lb
ammonia, aqueous solutions (1336-21-6)		
CERCLA RQ		1000 lb

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

phosphoric acid (7664-38-2)

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

potassium hydroxide (1310-58-3)

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

Simplot Grower Solutions 3-18-18 Liquid Fertilizer

Safety Data Sheet

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

ammonia, 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:

H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H320	Causes eye irritation

SDS US (GHS HazCom 2012)

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