

Simplot Grower Solutions ECLIPSE 46-0-0

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 : Substance
Substance name : Simplot Grower Solutions ECLIPSE 46-0-0
Product code : M28529

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 2B H320

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H320 - Causes eye irritation
Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical attention

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

Name : Simplot Grower Solutions ECLIPSE 46-0-0

Name	Product identifier	%	GHS-US classification
urea (57-13-6)	(CAS No) 57-13-6		Eye Irrit. 2B, H320
N-(n-butyl)-thiophosphonic triamide	(CAS No) 94317-64-3		Eye Irrit. 2A, H319 Skin Sens. 1B, H317 Repr. 2, H361 STOT SE 3, H335
1,2,3-Propanetriol	(CAS No) 56-81-5		Eye Irrit. 2B, H320
dimethyl sulfoxide	(CAS No) 67-68-5		Flam. Liq. 4, H227
benzaldehyde	(CAS No) 100-52-7		Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302
Proprietary			Not classified

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

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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 : 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 : 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 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.

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.

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

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N-(n-butyl)-thiophosphonic triamide (94317-64-3)
Not applicable
dimethyl sulfoxide (67-68-5)
Not applicable
1,2,3-Propanetriol (56-81-5)
Not applicable
benzaldehyde (100-52-7)
Not applicable
Proprietary
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.
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 Light yellow to colourless On exposure to air: yellow-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): Almost odourless Garlic odour Odourless Almond odour 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
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 : • dimethyl sulfoxide: 100 g/100ml • 1,2,3-Propanetriol: 100 g/100ml (25 °C, Complete) • benzaldehyde: 0.3 g/100ml • 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

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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

N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
dimethyl sulfoxide (67-68-5)	
LD50 oral rat	14500 mg/kg (Rat)
ATE US (oral)	14500.000 mg/kg bodyweight
1,2,3-Propanetriol (56-81-5)	
LD50 oral rat	27200 mg/kg (Rat; Experimental value)
LC50 inhalation rat (mg/l)	> 2.75 mg/l/4h (Rat; Experimental value)
ATE US (oral)	27200.000 mg/kg bodyweight
benzaldehyde (100-52-7)	
LD50 oral rat	1300 mg/kg (Rat)
LD50 dermal rat	> 1250 mg/kg (Rat)
LD50 dermal rabbit	5000 mg/kg (Rabbit)
ATE US (oral)	1300.000 mg/kg bodyweight
ATE US (dermal)	5000.000 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

Skin corrosion/irritation : Not classified
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

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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 eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

dimethyl sulfoxide (67-68-5)	
LC50 fish 1	32300 mg/l 96 h; <i>Salmo gairdneri</i> (<i>Oncorhynchus mykiss</i>)
EC50 Daphnia 1	58200 mg/l (18 h; <i>Daphnia magna</i>)
LC50 fish 2	33500 mg/l (96 h; <i>Lepomis macrochirus</i>)
EC50 Daphnia 2	22300 mg/l (<i>Daphnia pulex</i>)
TLM fish 1	33500 ppm (48 h; <i>Lepomis macrochirus</i>)
Threshold limit algae 1	500 mg/l (48 h; Chlorophyta; Growth rate)
1,2,3-Propanetriol (56-81-5)	
LC50 fish 1	54000 mg/l (96 h; <i>Salmo gairdneri</i> (<i>Oncorhynchus mykiss</i>); Lethal)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
EC50 Daphnia 1	> 10000 mg/l (24 h; <i>Daphnia magna</i> ; Locomotor effect)
LC50 fish 2	> 1000 mg/l (96 h; Pisces)
TLM fish 1	> 1000 ppm (96 h; Pisces)
TLM other aquatic organisms 1	> 1000 ppm (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit algae 1	> 10000 mg/l (8 days; <i>Scenedesmus quadricauda</i> ; Turbid water)
Threshold limit algae 2	2900 mg/l (192 h; <i>Microcystis aeruginosa</i> ; Toxicity test)
benzaldehyde (100-52-7)	
LC50 fish 1	1.1 mg/l (96 h; <i>Lepomis macrochirus</i>)
EC50 Daphnia 1	50 mg/l (24 h; <i>Daphnia magna</i>)
EC50 other aquatic organisms 1	534 mg/l (5 h; Bacteria; Activated sludge)
LC50 fish 2	11.2 mg/l 96 h; <i>Salmo gairdneri</i> (<i>Oncorhynchus mykiss</i>)
Threshold limit other aquatic organisms 1	132 mg/l (<i>Pseudomonas putida</i>)
Threshold limit algae 1	100 mg/l (336 h; <i>Chlorella</i> sp.; Inhibitory)
Threshold limit algae 2	34 mg/l (<i>Scenedesmus quadricauda</i>)
urea (57-13-6) (57-13-6)	
LC50 fish 1	> 6810 mg/l (96 h; <i>Leuciscus idus</i> ; Nominal concentration)
EC50 Daphnia 1	> 10000 mg/l (48 h; <i>Daphnia magna</i> ; Nominal concentration)
LC50 fish 2	17500 mg/l (96 h; <i>Poecilia reticulata</i>)
EC50 Daphnia 2	> 10000 mg/l (24 h; <i>Daphnia magna</i>)
TLM fish 1	17500 ppm (96 h; <i>Poecilia reticulata</i>)
Threshold limit other aquatic organisms 1	120000 mg/l (16 h; Bacteria; Toxicity test)
Threshold limit other aquatic organisms 2	> 10000 mg/l (<i>Pseudomonas putida</i>)
Threshold limit algae 1	> 10000 mg/l (168 h; <i>Scenedesmus quadricauda</i> ; Growth rate)
Threshold limit algae 2	47 mg/l (192 h; <i>Microcystis aeruginosa</i> ; Growth rate)

12.2. Persistence and degradability

Simplot Grower Solutions ECLIPSE 46-0-0	
Persistence and degradability	Not established.
N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
Persistence and degradability	Not established.

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dimethyl sulfoxide (67-68-5)	
Persistence and degradability	Not readily biodegradable in water. Photolysis in the air.
1,2,3-Propanetriol (56-81-5)	
Persistence and degradability	Readily biodegradable in water. Not established.
Biochemical oxygen demand (BOD)	0.87 g O ₂ /g substance
Chemical oxygen demand (COD)	1.16 g O ₂ /g substance
ThOD	1.217 g O ₂ /g substance
BOD (% of ThOD)	0.71 % ThOD
benzaldehyde (100-52-7)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	1.62 g O ₂ /g substance
Chemical oxygen demand (COD)	1.98 g O ₂ /g substance
ThOD	2.42 g O ₂ /g substance
BOD (% of ThOD)	0.67 % ThOD
Proprietary	
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 ECLIPSE 46-0-0	
Bioaccumulative potential	Not established.
N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
Bioaccumulative potential	Not established.
dimethyl sulfoxide (67-68-5)	
BCF fish 1	< 0.4 (Cyprinus carpio; Test duration: 6 weeks)
Log Pow	-2.03
Bioaccumulative potential	Bioaccumulation: not applicable.
1,2,3-Propanetriol (56-81-5)	
Log Pow	-1.75 (Experimental value; Equivalent or similar to OECD 107)
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
benzaldehyde (100-52-7)	
BCF other aquatic organisms 1	4.2 - 7.8 (Estimated value)
Log Pow	1.48 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Proprietary	
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

1,2,3-Propanetriol (56-81-5)	
Surface tension	0.0634 N/m (20 °C; 1000 g/l)
benzaldehyde (100-52-7)	
Surface tension	0.040 N/m (20 °C)

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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:

Proprietary	CAS No	%
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This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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

dimethyl sulfoxide (67-68-5)

U.S. - New Jersey - Right to Know Hazardous Substance List

1,2,3-Propanetriol (56-81-5)

U.S. - New Jersey - Right to Know Hazardous Substance List

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benzaldehyde (100-52-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information : None.

Full text of H-statements:

H227	Combustible liquid
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child

SDS US (GHS HazCom 2012)

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