

SIMPLOT TURF & HORTICULTURE 5-4-1 CUSTOM BLEND FOR TORO NURSERY

Safety Data Sheet

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

Date of issue: 05/11/2023

Revision date: 05/11/2023

Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : SIMPLOT TURF & HORTICULTURE 5-4-1 CUSTOM BLEND FOR TORO NURSERY
Product code : M80515

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fertilizer

1.3. Supplier

Simplot AB Retail, Inc., DBA Simplot Turf and Horticulture
P.O. Box 9296
Boise, ID 83707

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 2 H319 Causes serious eye irritation
Carcinogenicity Category 1A H350 May cause cancer
Specific target organ toxicity (repeated exposure) Category 2 H373 May cause damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H319 - Causes serious eye irritation
H350 - May cause cancer
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
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 advice/attention.
P314 - Get medical advice/attention if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

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. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
dolomite	(CAS-No.) 16389-88-1	20-27	Eye Irrit. 2B, H320
Ammonium Sulfate Nitrate	(CAS-No.) 51177-03-8	7-11	Eye Irrit. 2B, H320
Calcium Phosphate	(CAS-No.) 7758-23-8	5-6	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
urea (57-13-6)	(CAS-No.) 57-13-6	1-5	Eye Irrit. 2B, H320
quartz	(CAS-No.) 14808-60-7	.5-2.5	Eye Irrit. 2B, H320 Carc. 1A, H350 STOT SE 3, H335 STOT RE 2, H373
formaldehyde/urea,resins	(CAS-No.) 9011-05-6	0-2	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Monoammonium Phosphate	(CAS-No.) 7722-76-1	1-3	Eye Irrit. 2B, H320 STOT SE 3, H335
Ferrous Sulfate Monohydrate	(CAS-No.) 17375-41-6	1-2	Acute Tox. 4 (Oral), H302 Eye Irrit. 2B, H320 STOT SE 3, H335
Dicalcium Phosphate	(CAS-No.) 7757-93-9	.5-1.5	Eye Irrit. 2B, H320
Iron Sucrate	(CAS-No.) 8047-67-4	0-1	Acute Tox. 3 (Oral), H301 Carc. 2, H351

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product.
 Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
 Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available	
Ammonium Sulfate Nitrate (51177-03-8)	
No additional information available	
Monoammonium Phosphate (7722-76-1)	
No additional information available	
Calcium Phosphate (7758-23-8)	
No additional information available	
Dicalcium Phosphate (7757-93-9)	
No additional information available	
dolomite (16389-88-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m ³)	3 mg/m ³
quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Silica crystalline - quartz
ACGIH TWA (mg/m ³)	0.025 R
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2019
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Respirable) (Silica: Crystalline)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO ₂ +5)) for mppcf and (10 mg/m ³ / (%SiO ₂ +2)) for mg/m ³ . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
urea (57-13-6) (57-13-6)	
No additional information available	
formaldehyde/urea,resins (9011-05-6)	
No additional information available	
Ferrous Sulfate Monohydrate (17375-41-6)	
No additional information available	
Iron Sucrate (8047-67-4)	
No additional information available	

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8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Color : Mixture contains one or more component(s) which have the following colour(s):
Colorless Colourless-white Unpurified: grey-brown Colourless to white Commercial substance:
grey-green White Off-white White to dark grey Pure substance: colourless to white-grey
Unpurified: yellow to brown Commercial substance: yellow to brown Colourless Pure
substance: colourless to white Unpurified: grey-blue or red Black White-grey to green-blue
Rose Colourless or white
- Odor : 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:
Odourless Mild odour Petroleum-like odour In moist air: Ammonia odour
- Odor threshold : No data available
- pH : No data available
- Melting point : No data available
- Freezing point : Not applicable
- Boiling point : No data available
- Flash point : Not applicable
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : Non flammable.
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Relative density : No data available
- Solubility : No data available
- Partition coefficient n-octanol/water (Log Pow) : No data available
- Auto-ignition temperature : Not applicable
- Decomposition temperature : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : No data available

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Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Monoammonium Phosphate (7722-76-1)	
LD50 oral rat	5750 mg/kg (Rat)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
Calcium Phosphate (7758-23-8)	
LD50 oral rat	17500 mg/kg (Rat; Literature)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature)
Dicalcium Phosphate (7757-93-9)	
LD50 oral rat	10000 mg/kg (Rat)
LD50 dermal rat	7940 mg/kg (Rat)
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)
formaldehyde/urea,resins (9011-05-6)	
LD50 oral rat	8394 mg/kg (Rat)
LD50 dermal rat	> 2100 mg/kg (Rat)
Ferrous Sulfate Monohydrate (17375-41-6)	
LD50 oral rat	319 mg/kg

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified

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Carcinogenicity : May cause cancer.

quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans

Iron Sucrate (8047-67-4)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Monoammonium Phosphate (7722-76-1)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Calcium Phosphate (7758-23-8)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

quartz (14808-60-7)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

formaldehyde/urea,resins (9011-05-6)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Ferrous Sulfate Monohydrate (17375-41-6)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : May cause damage to organs through prolonged or repeated exposure.

quartz (14808-60-7)	
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Monoammonium Phosphate (7722-76-1)	
LC50 fish 1	155 ppm (96 h; Pimephales promelas)

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)

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formaldehyde/urea,resins (9011-05-6)	
LC50 fish 1	> 500 mg/l (96 h; Leuciscus idus; Estimated value)
EC50 Daphnia 1	65000 mg/l (Daphnia magna; QSAR)

12.2. Persistence and degradability

Ammonium Sulfate Nitrate (51177-03-8)	
Persistence and degradability	Not established.

Monoammonium Phosphate (7722-76-1)	
Persistence and degradability	Biodegradability in water: no data available. Not established.

Calcium Phosphate (7758-23-8)	
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

Dicalcium Phosphate (7757-93-9)	
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

dolomite (16389-88-1)	
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

quartz (14808-60-7)	
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

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

formaldehyde/urea,resins (9011-05-6)	
Persistence and degradability	Not readily biodegradable in water. Not established.

Ferrous Sulfate Monohydrate (17375-41-6)	
Persistence and degradability	Not established.

Iron Sucrate (8047-67-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Ammonium Sulfate Nitrate (51177-03-8)	
Bioaccumulative potential	Not established.

Monoammonium Phosphate (7722-76-1)	
Bioaccumulative potential	Not bioaccumulative. Not established.

Calcium Phosphate (7758-23-8)	
Bioaccumulative potential	No bioaccumulation data available. Not established.

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Dicalcium Phosphate (7757-93-9)	
Bioaccumulative potential	Not bioaccumulative. Not established.
dolomite (16389-88-1)	
Bioaccumulative potential	No bioaccumulation data available. Not established.
quartz (14808-60-7)	
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Bioaccumulative potential	No bioaccumulation data available. 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.)
Partition coefficient n-octanol/water (Log Pow)	< -1.73 (Experimental value; EU Method A.8: Partition Coefficient)
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
formaldehyde/urea,resins (9011-05-6)	
Bioaccumulative potential	No bioaccumulation data available. Not established.
Ferrous Sulfate Monohydrate (17375-41-6)	
Bioaccumulative potential	Not established.
Iron Sucrate (8047-67-4)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

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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:

Ammonium Sulfate Nitrate	CAS-No. 51177-03-8	7-11%
Ferrous Sulfate Monohydrate	CAS-No. 17375-41-6	1-2%
Iron Sucrate	CAS-No. 8047-67-4	0-1%

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.

copper(II)sulfate	CAS-No. 7758-98-7	0-.5%
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formaldehyde/urea,resins (9011-05-6)

EPA Labeling Requirements	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
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15.2. International regulations

CANADA

Ammonium Sulfate Nitrate (51177-03-8)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Monoammonium Phosphate (7722-76-1)

Listed on the Canadian DSL (Domestic Substances List)

Calcium Phosphate (7758-23-8)

Listed on the Canadian DSL (Domestic Substances List)

Dicalcium Phosphate (7757-93-9)

Listed on the Canadian DSL (Domestic Substances List)

dolomite (16389-88-1)

Listed on the Canadian NDSL (Non-Domestic Substances List)

quartz (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List)

urea (57-13-6) (57-13-6)

Listed on the Canadian DSL (Domestic Substances List)

formaldehyde/urea,resins (9011-05-6)

Listed on the Canadian DSL (Domestic Substances List)

Ferrous Sulfate Monohydrate (17375-41-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Iron Sucrate (8047-67-4)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

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

Component	State or local regulations
quartz(14808-60-7)	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

SECTION 16: Other information

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Full text of H-phrases:

H301	Toxic if swallowed
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H350	May cause cancer
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.