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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : Turf Supreme 16-6-8

Product code : M74025

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

1.3. Details of the supplier of the safety data sheet

JR Simplot Company Boise, ID 83707 T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Irrit. 2B H320 STOT SE 3 H335

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H320 - Causes eye irritation

H335 - May cause respiratory irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash ... thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

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

P337+P313 - If eye irritation persists: Get medical advice/attention P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to ... specify in accordance with local/regional/national

regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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| Name | Product identifier | % | Classification (GHS-US) |
|------------------------|---------------------|---|--|
| ammonium sulfate | (CAS No) 7783-20-2 | | Eye Irrit. 2B, H320 STOT SE 3, H335 |
| Monoammonium Phosphate | (CAS No) 7722-76-1 | | Eye Irrit. 2B, H320 STOT SE 3, H335 |
| Wax | (CAS No) 64771-72-8 | | Not classified |
| Iron Oxysulfate | | | Eye Irrit. 2B, H320 |
| Manganese Oxysulfate | | | Eye Irrit. 2B, H320 |
| potassium chloride | (CAS No) 7447-40-7 | | Not classified |

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 : Assure fresh air breathing. 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 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.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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

vapor.

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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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 : Gray granules.

Color : Gray
Odor : Odorless

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available : No data available

Freezing point : No data available
Boiling point : No data available
Flash point : Non-flammable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available
Relative vapor density at 20 °C : No data available

Relative density : No data available

Density : 63 lbs/ft^3
Solubility : Water: 60 q/100n

Solubility : Water: 60 g/100ml
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

Explosive limits

No additional information available

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No data available

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SECTION 10: Stability and reactivity

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

Oxidizing agent. Prolonged contact may cause oxidation of unprotected metals. Strong acids. Strong bases.

Hazardous decomposition products

Extremely high temperatures. The product may reach melting point and decompose to release NH3, SOx, POx, or CN. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity : Not classified

| ammonium sulfate (7783-20-2) | | |
|------------------------------|---------------------------------|--|
| LD50 oral rat | 2840 mg/kg (Rat) | |
| LD50 dermal rat | > 2000 mg/kg | |
| ATE US (oral) | 2840.00000000 mg/kg body weight | |

| Monoammonium Phosphate (7722-76-1) | | |
|------------------------------------|---------------------------------|--|
| LD50 oral rat | 5750 mg/kg (Rat) | |
| LD50 dermal rat | > mg/kg | |
| LD50 dermal rabbit | > 7940 mg/kg (Rabbit) | |
| ATE US (oral) | 5750,00000000 mg/kg body weight | |

| Manganese Oxysulfate | |
|----------------------|---------------------------------|
| LD50 oral rat | 2150 mg/kg |
| ATE US (oral) | 2150.00000000 mg/kg body weight |

| potassium chloride (7447-40-7) | |
|--------------------------------|--------------------------------|
| LD50 oral rat | 2600 mg/kg (Rat) |
| ATE US (oral) | 2600.0000000 mg/kg body weight |

| Skin corrosion/irritation | : | Not classified |
|-----------------------------------|---|------------------------|
| Serious eye damage/irritation | : | Causes eye irritation. |
| Respiratory or skin sensitization | : | 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) : May cause respiratory irritation.

Specific target organ toxicity (repeated : Not classified

exposure)

Based on available data, the classification criteria are not met

: Not classified Aspiration hazard

> Based on available data, the classification criteria are not met : Based on available data, the classification criteria are not met.

Potential Adverse human health effects and symptoms

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SECTION 12: Ecological information

12.1. **Toxicity**

| ammonium sulfate (7783-20-2) | |
|-------------------------------------|--|
| LC50 fish 1 | 126 mg/l (96 h; Poecilia reticulata) |
| 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) |
| Monoammonium Phosphate (7722-76-1) | |
| LC50 fish 1 | 155 ppm (96 h; Pimephales promelas) |
| 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) |
| 12.2. Persistence and degradability | |
| Turf Supreme 16-6-8 | |
| Persistence and degradability | Not established. |
| ammonium sulfate (7783-20-2) | |
| Persistence and degradability | Biodegradability in water: no data available. Not established. |
| Monoammonium Phosphate (7722-76-1) | |
| Persistence and degradability | Biodegradability in water: no data available. Not established. |
| Wax (64771-72-8) | |
| Persistence and degradability | Not established. |
| Iron Oxysulfate | |
| Persistence and degradability | Not established. |
| 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 |

12.3. Bioaccumulative potential

| Turf Supreme 16-6-8 | | |
|--------------------------------|---|-----|
| Bioaccumulative potential | Not established. | |
| ammonium sulfate (7783-20-2) | | |
| Log Pow | -5.1 | |
| Bioaccumulative potential | Bioaccumulation: not applicable. Not established. | |
| Monoammonium Phosphate (7722-7 | 6-1) | |
| Bioaccumulative potential | Not bioaccumulative. Not established. | |
| Wax (64771-72-8) | | |
| Bioaccumulative potential | Not established. | |
| Iron Oxysulfate | | |
| Bioaccumulative potential | Not established. | |
| potassium chloride (7447-40-7) | | |
| Log Pow | -0.46 (Estimated value) | |
| Bioaccumulative potential | Bioaccumulation: not applicable. Not established. | |
| 00/05/0044 | FN /Facilish UC) | E/7 |

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer : No additional information available

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

In accordance with DOT Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

Transport document description

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 on the Toxic Substances Control Act (TSCA) inventory except for:

| Wax | CAS No 64771-72-8 | C<=25.00% |
|----------------------|-------------------|-----------|
| Iron Oxysulfate | CAS No | C<=25.00% |
| Manganese Oxysulfate | CAS No | C<=25.00% |

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

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

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SECTION 16: Other information

:

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

Regulation (EC) No 1907/2006.

Other information : None.

Full text of H-phrases: see section 16:

| Eye Irrit. 2B | Serious eye damage/eye irritation Category 2B |
|---------------|---|
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H320 | Causes eye irritation |
| H335 | May cause respiratory irritation |

SDS US (GHS HazCom 2012)

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