

## Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/24/2014

Reviewed on 02/24/2014

### 1 Identification

- **Product identifier**
- **Trade name: Turf Rx P+ Flowable**
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Redox Chemicals LLC  
130 South 100 West  
PO Box 129  
Burley, ID 83318  
Phone: 208-678-2610  
Fax: 208-677-3609
- **Emergency telephone number:** 208-678-2610

### 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms** Non-Regulated Material
- **Signal word** Non-Regulated Material
- **Hazard statements** Non-Regulated Material
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

### 3 Composition/information on ingredients

98059-61-1	Phosphate	15-35%
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- **Description:** Mixture of the substances listed below with nonhazardous additions.

#### Dangerous components:

7727-37-9	nitrogen ⚠ Press. Gas, H281; ⚠ STOT SE 2, H371	2-12%
7447-40-7	potassium chloride	≤ 2.5%
7664-41-7	ammonia, anhydrous ⚠ Flam. Liq. 3, H226; ⚠ Press. Gas, H280; ⚠ Acute Tox. 3, H331; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; Flam. Gas 2, H221	≤ 2.5%

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

(Contd. on page 2)

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(Contd. of page 1)

- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Give large amounts of water. If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**7727-37-9 nitrogen**

TLV Simple asphyxiant

**7664-41-7 ammonia, anhydrous**

PEL Long-term value: 35 mg/m<sup>3</sup>, 50 ppm

REL Short-term value: 27 mg/m<sup>3</sup>, 35 ppm

Long-term value: 18 mg/m<sup>3</sup>, 25 ppm

TLV Short-term value: 24 mg/m<sup>3</sup>, 35 ppm

Long-term value: 17 mg/m<sup>3</sup>, 25 ppm

(Contd. on page 3)

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(Contd. of page 2)

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Select glove material based on penetration times, rates of diffusion and degradation.
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.
- **Eye protection:** Goggles recommended during refilling.

### \* 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form:** Liquid
  - Color:** Dark brown
  - Odor:** Characteristic
- **pH-value @ 20 °C (68 °F):** 4-5
- **Change in condition**
  - Melting point/Melting range:** Not determined.
  - Boiling point/Boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:**
  - Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower:** Not determined.
  - Upper:** Not determined.
- **Vapor pressure:** Not determined.
- **Density:** Not determined.
- **Relative density** Not determined.
- **Vapour density** Not determined.

(Contd. on page 4)

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Trade name: **Turf Rx P+ Flowable**

(Contd. of page 3)

- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Solvent content:**
  - Organic solvents:** 0.0 %
  - Solids content:** 17.0 %
- **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
 The product is not subject to classification according to internally approved calculation methods for preparations.  
 When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water

(Contd. on page 5)

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(Contd. of page 4)

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### \*14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

7664-41-7	ammonia, anhydrous
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· **Section 313 (Specific toxic chemical listings):**

7664-41-7	ammonia, anhydrous
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· **TSCA (Toxic Substances Control Act):**

7727-37-9	nitrogen
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7447-40-7	potassium chloride
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7664-41-7	ammonia, anhydrous
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7647-14-5	sodium chloride
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· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

(Contd. on page 6)

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(Contd. of page 5)

· <b>Chemicals known to cause reproductive toxicity for males:</b>		
None of the ingredients is listed.		
· <b>Chemicals known to cause developmental toxicity:</b>		
None of the ingredients is listed.		
· <b>Carcinogenic categories</b>		
· <b>EPA (Environmental Protection Agency)</b>		
None of the ingredients is listed.		
· <b>TLV (Threshold Limit Value established by ACGIH)</b>		
None of the ingredients is listed.		
· <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>		
None of the ingredients is listed.		
· <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>		
Corrosive to eyes		
· <b>GHS label elements</b> Non-Regulated Material		
· <b>Hazard pictograms</b> Non-Regulated Material		
· <b>Signal word</b> Non-Regulated Material		
· <b>Hazard statements</b> Non-Regulated Material		
· <b>National regulations:</b>		
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.		
· <b>State Right to Know</b>		
98059-61-1	Phosphate	15-35%
7727-37-9	nitrogen ⚠ Press. Gas, H281; ⚠ STOT SE 2, H371	2-12%
7447-40-7	potassium chloride	≤ 2.5%
7664-41-7	ammonia, anhydrous ⚠ Flam. Liq. 3, H226; ⚠ Press. Gas, H280; ⚠ Acute Tox. 3, H331; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; Flam. Gas 2, H221	≤ 2.5%
7647-14-5	sodium chloride ⚠ STOT SE 3, H335	≤ 2.5%
None of the ingredients is listed.		
· <b>Chemical safety assessment:</b> A Chemical Safety Assessment has not been carried out.		

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 02/24/2014 / 1

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

(Contd. on page 7)

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(Contd. of page 6)

HMIS: Hazardous Materials Identification System (USA)

Flam. Gas 2: Flammable gases, Hazard Category 2

Press. Gas: Gases under pressure: Compressed gas

Press. Gas: Gases under pressure: Refrigerated liquefied gas

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

STOT SE 2: Specific target organ toxicity - Single exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

**\* Data compared to the previous version altered.**

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