

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 09/28/2017

Reviewed on 09/28/2017

### \* 1 Identification

- **Product Identifier**
- **Trade name: TurfRx OxyCal**
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** Fertilizer
- **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:** 208-431-2314

### 2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.  
 STOT SE 3 H335 May cause respiratory irritation.  
 Eye Irrit. 2B H320 Causes eye irritation.

- **Label elements:**
- **GHS label elements**  
 The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS07

- **Signal word:** Warning
- **Hazard-determining components of labeling:**  
 Calcium sulphide
- **Hazard statements:**  
 H315+H320 Causes skin and eye irritation.  
 H335 May cause respiratory irritation.
- **Precautionary statements:**

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves.
P302+P352	If on skin: Wash with plenty of water.
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.
P321	Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

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P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.  
 45 % of the mixture consists of component(s) of unknown toxicity.

· **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Hazard(s) not otherwise classified (HNOC):** None known

### 3 Composition/Information on Ingredients

· **Non-hazardous components:**

	Soluble Potash (K <sub>2</sub> O)	15-35%
98059-61-1	Phosphate	2-12%

· **Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with non-hazardous additions.

· **Dangerous Components:**

	Calcium sulphide	15-35%
	 Aquatic Acute 1, H400;  Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	

· **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

### 4 First-Aid Measures

· **Description of first aid measures:**

· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation occurs, consult a doctor.

· **After eye contact:**

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

If easy to do so, remove contact lenses if worn.

If eye irritation occurs, consult a doctor.

· **After swallowing:** If swallowed and symptoms occur, consult a doctor.

· **Information for 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.

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### 5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:**  
Mouth respiratory protective device.  
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:**  
Mount respiratory protective device.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Dispose of the collected material according to regulations.
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

20548-54-3	Calcium sulphide	12 mg/m <sup>3</sup>
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· **PAC-2:**

20548-54-3	Calcium sulphide	130 mg/m <sup>3</sup>
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· **PAC-3:**

20548-54-3	Calcium sulphide	790 mg/m <sup>3</sup>
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### 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:** No special precautions are necessary if used correctly.
- **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:** Store in the original container.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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 occupational exposure limits:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing and wash before reuse.  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.
- **Breathing equipment:**  
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

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 cannot 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:**



Tightly sealed goggles

### 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Powder
<b>Color:</b>	Light brown
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	Not determined.
- **pH-value @ 20 °C (68 °F):** 9.7
- **Change in condition**

<b>Melting point/Melting range:</b>	--
<b>Boiling point/Boiling range:</b>	Undetermined.
- **Flash point:** None
- **Flammability (solid, gaseous):** Not determined.

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- **Ignition temperature:** Not applicable
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapor pressure:** Not applicable.
- **Density:** Not determined.
- **Relative density:** Not determined.
- **Vapor density:** Not applicable.
- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with:**
  - Water: Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- **Solvent content:**
- **VOC content:** 0.00 %
- **Other information:** No further relevant information available.

### 10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** Contact with acids releases toxic gases.
- **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:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant
- **Carcinogenic categories:**

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

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**Trade name: TurfRx OxyCal****· NTP (National Toxicology Program):**

None of the ingredients are listed.

**· OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

### 12 Ecological Information

**· Toxicity:****· Aquatic toxicity:** No further relevant information available.**· Persistence and degradability:** No further relevant information available.**· Behavior in environmental systems:****· Bioaccumulative potential:** No further relevant information available.**· Mobility in soil:** No further relevant information available.**· Additional ecological information:****· General notes:**

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

**· 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:**

Observe all federal, state and local environmental regulations when disposing of this material.

**· Uncleaned packagings****· Recommendation:** Disposal must be made according to official regulations.

### 14 Transport Information

**· UN-Number:****· DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material**· UN proper shipping name:****· DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material**· Transport hazard class(es):****· DOT, ADR/ADN, ADN, IMDG, IATA****· Class:** Non-Regulated Material**· Packing group:****· DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material**· Environmental hazards:** Not applicable.**· 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":** Non-Regulated Material

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**15 Regulatory Information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

· **Section 355 (extremely hazardous substances):**  
None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**  
None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**  
20548-54-3 Calcium sulphide

- **California Proposition 65:**

· **Chemicals known to cause cancer:**  
None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**  
None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**  
None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**  
None of the ingredients are listed.

· **New Jersey Right-to-Know List:**  
None of the ingredients are listed.

· **New Jersey Special Hazardous Substance List:**  
None of the ingredients are listed.

· **Pennsylvania Right-to-Know List:**  
None of the ingredients are listed.

· **Pennsylvania Special Hazardous Substance List:**  
None of the ingredients are listed.

- **Carcinogenic categories:**

· **EPA (Environmental Protection Agency):**  
None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH):**  
None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**  
None of the ingredients are listed.

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS07



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- **Hazard statements:**  
H315+H320 Causes skin and eye irritation.  
H335 May cause respiratory irritation.
- **Precautionary statements:**
  - P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
  - P264 Wash thoroughly after handling.
  - P271 Use only outdoors or in a well-ventilated area.
  - P280 Wear protective gloves.
  - P302+P352 If on skin: Wash with plenty of water.
  - 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.
  - P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
  - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
  - P405 Store locked up.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

None of the ingredients are listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision:** 09/28/2017 / 8

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 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)  
 HMIS: Hazardous Materials Identification System (USA)  
 VOC: Volatile Organic Compounds (USA, EU)  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 NIOSH: National Institute for Occupational Safety and Health  
 OSHA: Occupational Safety & Health Administration  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit  
 Skin Irrit. 2: Skin corrosion/irritation – Category 2  
 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A  
 Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B  
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

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**Trade name: TurfRx OxyCal**· \* **Data compared to the previous version altered.**SDS created by MSDS Authoring Services [www.msdsauthoring.com](http://www.msdsauthoring.com) +1-877-204-9106