SAFETY DATA SHEET - U.S. DEPARTMENT OF LABOR

May be used to comply with Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200, Standard must be consulted for specific requirements (non-mandatory form) Form Approved OMB No. 1218-0072

Date Prepared: 09-06-2017 Date Revised: 08 10 2019

Section 1: Identification of the Substance/Preparation and of the Company/Undertaking

1.1 Product Identifier

Trade Name: SoilBiotics OS 46 (for conventional use only)

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against It

Recommended Uses: Professional fertilizer application

1.3 Details of the Distributor of the Safety Data Sheet

Manufactured By: SoilBiotics

2902 West State Route 17 Kankakee, IL 60901 (815) 929-1752

Country: United States

1.1 In Case of Emergency: USA, Canada, Mexico call Infotrac at 1-800-535-5053

International call Infotrac at 1-352-323-3500

Section 2: Hazards Identification



WARNING

CAUSES SKIN IRRITATION

CAUSES SERIOUS EYE IRRITATION

MAY CAUSE RESPIRATORY IRRITATION

Precautionary Statements:

If inhaled: Seek fresh air, wash out mouth with water and blow nose thoroughly

If Ingested: Wash out mouth with water. If materials swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

If Contact with Skin: Wash the skin with soap & water.

If Contact with Eyes: Remove contacts lenses and Flush with water using eye wash equipment

If any Irritations Persists: Seek medical attention.

2.3 Hazards not otherwise classified: Product forms slippery surface when combined with water

Section 3: Composition/Information on Ingredients

3.1 Substance/mixture: Mixture

3.2 Mixtures

Substance	CAS No	EC No	REACH	Inclusion		DSD-	CLP -	%
			Reg No	Rate	Notes	Classification	Classification	
Urea	57-13-6							+/- 99%
Proprietary								+/- 1%

Section 4: First Aid Measures

4.1 Description of First Aid Measures

Inhalation: Seek fresh air, wash out mouth with water and blow nose thoroughly.

Ingestion: Wash out mouth with water. If materials swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are sever.

Skin Contact: Wash the skin with soap & water. Seek medical attention if irritation continues. **Eye Contact:** Flush with water (preferably using eye wash equipment) and remove contact lenses.

Seek medical attention if irritation occurs.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Potential acute health effects

Eye Contact: No known significant effects or critical hazards

Inhalation: Exposure to decomposition products may cause health hazard. Serious effects may be delayed following

exposure

Skin Contact: No known significant effects or critical hazards **Ingestion:** No known significant effects or critical hazards

Over-exposure signs/symptoms
Eye Contact: No specific data
Inhalation: No specific data
Skin Contact: No specific data
Ingestion: No specific data

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment

Protection of first aiders: No action shall be taken involving any personal risk or without suitable training

See toxicological information (section 11)

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

5.1 Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire

Unsuitable extinguishing media: None identified

- 5.2 Specific hazards arising from the chemical: No specific fire or explosion hazard
- **5.3 Hazardous thermal decomposition products:** Decomposition products may include the following materials:

Carbon dioxide

Carbon monoxide

Nitrogen oxides

Ammonia

Avoid breathing dusts, vapors or fumes from burning materials

In case of inhalation of decomposition products in fire, symptoms may be delayed

- **5.4 Special protective actions for fire-fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training
- **5.5 Special protective equipment for fire fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

Section 6: Accidental Release Measures

6.1 Personal Precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and Material for Containment and Clean Up

Small spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

6.4 Reference to Other Sections: See section 8 for type of protective equipment. See section 13 for instructions on disposal.

Section 7: Handling and Storage

Precautions for Safe Handling

- 7.1 Protective Measures: Put on appropriate personal protective equipment (see Section 8).
- **7.2 Advice on general occupational hygiene:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- 7.3 Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure Limits:

AIHA WEEL (1999-01-01) Time Weighted Average 10 mg/m3

NIOSH REL (2005-09-03)

Appropriate Engineering Controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental Exposure Controls: Emission from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

8.2 Personal Protective Measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. A washing facility or water for eye and skin cleaning purposes should be present.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties:

Parameter	Value/Unit	Remark
Physical State: Solid	pH of 9	This pH level at 20° C or 68° F
Appearance	Orange granular	
Odor	None	
Melting/Freezing Point	133 – 134 ° C 271.4 – 273.2° F	
Boiling Point		Not Determined
Flash Point (Method)		Not Applicable
Flammable Limits (LEL / UEL)		Non-Flammable
Evaporation Rate		Not Determined
Vapour Pressure	0.000016 hPa	
Vapour Density	2.07 (Air=1)	
Auto-Ignition Temperature		Not Determined
Decomposition Temperature		Not Determined
Solubility in Water	624 g/l at 20° C or 68° F	Easily soluble in cold water

Section 10: Stability and Reactivity

10.1 Reactivity: Not available10.2 Chemical Stability: Stable

10.3 Possibility of Hazardous Reactions: None with storage precautions

10.4 Conditions to Avoid: Avoid contact with incompatible materials, metals and dust

10.5 Incompatible Materials: Calcium Hypochlorite and Sodium Hypochlorite, acids, alkalis, nitrates and nitrates

10.6 Hazardous Decomposition or By Products: Will not occur with normal storage

Section 11: Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity: No known significant effects or critical hazards

Corrosion/Irritation

Skin: No known significant effects or critical hazards **Eye:** No known significant effects or critical hazards

Respiratory: No known significant effects or critical hazards
Sensitization: No known significant effects or critical hazards
Mutagenicity: No known significant effects or critical hazards
Carcinogenicity: No known significant effects or critical hazards
Reproductive toxicity: No known significant effects or critical hazards

Teratogenicity: No known significant effects or critical hazards **11.2 Specific target organ toxicity (single exposure):** No known significant effects or critical hazards

11.3 Specific target organ toxicity (repeated exposure): No known significant effects or critical hazards

11.4 Aspiration hazard: No known significant effects or critical hazards

Information on the likely routes of exposure: Not available

11.5 Potential acute health effects

Eye contact: No known significant effects or critical hazards

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards **Ingestion:** No known significant effects or critical hazards

11.6 Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data Inhalation: No specific data Skin contact: No specific data Ingestion: No specific data

11.7 Delayed and immediate effects and also chronic effects from short and long term exposure

Short Term Exposure

Potential immediate effects: Not available Potential delayed effects: Not available

Long Term Exposure

Potential immediate effects: Not available Potential delayed effects: Not available

Potential Chronic Health Effects: No known significant effects or hazards

General: No known significant effects or critical hazards

Carcinogenicity: No known significant effects or critical hazards **Mutagenicity:** No known significant effects or critical hazards **Teratogenicity:** No known significant effects or critical hazards

Developmental effects: No known significant effects or critical hazards

Fertility effects: No known significant effects or critical hazards.

11.8 Over-exposure signs/symptoms

Eye contact: No specific data
Inhalation: No specific data.
Skin contact: No specific data
Ingestion: No specific data.

11.9 Numerical measures of toxicity

Acute toxicity estimates: Not available

Section 12: Ecological Information

12.1 Toxicity: No known significant effects or critical hazards

12.2 Persistence/degradability: No known significant effects or critical hazards

12.3 Bio-accumulative potential: No known significant effects or critical hazards

12.4 Mobility in soil

Soil/water partition coefficient (KOC): Not available

Mobility: This product may move with surface or groundwater flows because its water solubility is high

Other adverse effects: No known significant effects or critical hazards

13.1 Methods of Disposal: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States – RCRA Acute hazardous waste "P" List: Not listed United States – RCRA Toxic hazardous waste "U" List: Not listed

Section 14: Transport Information

14.1 UN Class: Not regulated **14.2 IMDG:** Not regulated **14.3 IATA:** Not regulated

14.4 DOT Classification: Not regulated

14.5 TDG: Not regulated

14.6 Special Precautions for User: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 IMSBC

Bulk cargo shipping name: UREA

Class: Not applicable

Group: C

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code: Not Applicable

Section 15: Regulatory Information

U.S. Federal regulations: None of the components are listed

EPA Clean Water Act (CWA): Not listed

Clean Air Act: Not listed

DEA List I & II Chemicals: Not listed SARA 302/304: Not applicable SARA 304 RQ: Not applicable SARA 311/312: Not applicable

Safety, health and environmental regulations specific for this product: No known other specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16: Other Information

16.1 HMIS Rating (0-4 with o representing minimal hazard):

Health=o Fire=o Reactivity=o Special Hazard=o

Prepared by: SoilBiotics

The information and recommendations contained herein are offered as a service to our customers but are not intended to relieve the user from its responsibility to investigate and understand pertinent sources of information and to comply with all laws and procedures applicable to the safe handling and use of these materials. The information and recommendations proved herein were believed by SoilBiotics to be accurate at the time of preparation or obtained from sources believed to be

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