SAFETY DATA SHEET

SECTION I: IDENTIFICATION

PRODUCT NAME: Bio-Remedy CM

MANUFACTURERS NAME: Polyorganic Technologies

ADDRESS:

110 MELRICH ROAD

SUITE 3

CRANBURY, NJ 08512

TELEPHONE NUMBER: (609) 288 - 8233

RECOMMENDED USES: Apply as soil drench to enhance biological activity in rhizosphere RESTRICTIONS: Do not apply to plants sensitive to any of the ingredients herein contained

SECTION 11: HAZARDS IDENTIFICATION

None of the ingredients are deemed hazardous

EFFECTS OF.MEDICAL CONDITIONS RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE:

Respiratory disease (bronchitis, asthma, emphysema)

OVEREXPOSURE: Acute: may cause eye & respiratory irritation

Chronic: None known

GENERAL PRECAUTIONS: Always practice good hygiene wash hands thoroughly after handling. Do not

get in eyes or on skin. Do not ingest PRIMARY ROUTE OF ENTRY: Lungs, eyes ATCC CLASSIFICATION: Bio-Safety Level 1

HEALTH: 1 FIRE: 0

REACTIVITY: 0 SPECIAL HAZARD: 0

SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS SUBSTANCE

| COMPONENT | CAS# | OSHA EXP. LIMITS * | TOXICITY |
|----------------------------------|-------------------------------|------------------------|-------------------------------|
| Dextrose Anhydrous | 50-99-7 | 15 mg / m ³ | LD ₅₀ 25,800 mg/kg |
| Sucrose | 57-50-1 | 15 mg / m ³ | LD ₅₀ 29,700 mg/kg |
| Rhizosphere Cultures on Dextrose | Trade Secret 29 CFR 1910:1200 | 10 mg / m ³ | NAV |
| Ferric Ammonium Citrate | 1185-57-5 | 10 mg / m ³ | NAV |
| Potassium Sulfate | 7778-80-5 | 10 mg / m ³ | LD ₅₀ 6,600 mg/kg |
| Amino Acids-Isolated Soy Protein | 9010-10-0 | 15 mg / m ³ | NAV - Food Grade |
| Potassium Humate | 68514-28-3 | NAV | NAV |
| Sodium Calcium Aluminosilicate | 1344-01-0 | 15 mg / m ³ | NAV-Feed Grade |
| Kelp Extract | 68844-77-9 | NAV | NAV |
| Yeast Extract | 8013-01-2 | 15 mg / m ³ | NAV - Food Grade |

^{*} Total Dust

SECTION IV: FIRST AID MEASURES

SKIN: Remove contaminated clothing and wash hands thoroughly after use. If irritation occurs consult with physician.

EYES: Flush eyes with cool water for 15 minutes, remove contact lenses and consult physician if irritation persists

INGESTION: If conscious rinse mouth and dilute with fluids. Consult physician or poison control for further treatment advice

INHALATION: Move person to fresh air and consult physician for further treatment advice.

NOTE TO PHYSICIAN (Antidote): N/A

OTHER: Contains soy proteins avoid product if you are allergic to soy proteins

SECTION V: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use appropriate media for underlying cause of fire.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus. Utilize

appropriate means to extinguish fire

FLASH POINT: N/A

SPECIAL FIRE HAZARDS: None SPECIFIC HAZARDS: None

SECTION VI: ACCIDENTAL RELEASE MEASURES AND DISPOSAL

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear protective equipment as outlined in section VII, sweep up spill using dust suppressant (such as water). Dispose of in accordance with local, state & federal regulations for Natural Soil Bacteria Protocol.

Waste is Non Hazardous as defined by RCRA (40 CFR261)

REPORTABLE QUANTITY (RQ) UNDER CERCLA: NO

SECTION VII: STORAGE, HANDLING

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Do not get in eyes, breathe in dust or ingest. Upon contact wash affected area with soap and water. Store in original container with lid tightly secured. Store product in a cool, dry place on a pallet or rack system. Avoid excessive heat, moisture, humidity & sunlight.

OTHER: Always follow label directions

SECTION VIII: EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

EYE / FACE PROTECTION: Eye protection (OSHA Approved) is recommended if potential for excessive dust exists

HAND / SKIN PROTECTION: Skin protection (OSHA Approved) is recommended for those individuals with sensitive skin

RESPIRATORY PROTECTION: Respiratory protection (OSHA Approved) is recommended if potential for excessive dust exists

OTHER: Wear pants, shirt, shoes and socks

ENGINEERING CONTROLS:

Local exhaust or general ventilation to maintain exposure below PEL

PEL: See Section II on individual components

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: off white - tan free flowing powder with characteristic fermentation odor

SOLUBILITY: approximately 97 % soluble by weight

BOILING POINT: N/A FLAMMABILITY: N/A

MELTING POINT: > 1000° F FREEZING POINT: N/A EVAPORATION RATE: N/A VAPOR DENSITY (Air = 1): N/A

SPECIFIC GRAVITY: ND

pH: 6 - 8

MOISTURE CONTENT: < 10.00 %

SECTION X: STABILITY AND REACTIVITY INFORMATION

HAZARDOUS DECOMPOSITION PRODUCT: None

INCOMPATIBILITY: Acids, bases, heat sources, reducing agents, disinfectants, hydrofluoric acid, excessive moisture

STABILITY: Stable under normal conditions HAZRDOUS POLYMERIZATION: None

CONDITIONS TO AVOID: Excessive moisture, heat & sunlight during storage

SECTION XI: TOXICITY INFORMATION

ACUTE TOXICITY

CARCINOGENICITY REFERENCE

Inhalation LD₅₀= N/E

I.A.R.C: No

Oral LD₅₀= N/E

N.T.P.: No

Dermal LD₅₀= N/E

O.S.H.A.: No

OTHER (specify): No

GENERAL PRECAUTIONS: Always practice good hygiene wash hands thoroughly after handling. Do not get

in eyes or on skin. Do not ingest.

MEDICAL CONDITIONS RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE: None known

PRIMARY ROUTE OF ENTRY: Eyes, skin

EFFECTS OF OVEREXPOSURE: Acute: may cause moderate eye irritation

Chronic: None known

THRESHOLD LIMIT VALUE: Mineral particulates from hydrated sodium calcium aluminosilicate are classified as nuisance dusts by the American Conference of Governmental Industrial Hygienists (ACGIH) in their 1983-1984 TLV list. This material contains some free silica.

Use ACGIH Publication to determine appropriate TLV

EFFECTS OF OVER EXPOSURE: Repeated inhalation of excessive concentration of any

dust, including this material, may lead to lung injury

SECTION XII: ECOLOGICAL INFORMATION

Avoid direct discharge in to streams, lakes, waterways & storm drains

ECOTOXICITY (AQUATIC AND TERRESTRIAL): No product specific data, deemed low toxicity based on individual components that comprise product

PERSISTENCE AND DEGRADABILITY: contains natural soil bacteria & food grade ingredients

(microbial nutrients). Generally considered chemically inert in the environment

BIOACCUMULATIVE POTENTIAL: No product specific data, product is not expected to

accumulate in soil or water based on individual components that comprise product

MOBILITY IN SOIL: No product specific data OTHER ADVERSE EFFECTS: None observed

SECTION XIII: DISPOSAL CONSIDERATIONS

Dispose of unused product in accordance with local, state & federal regulations for Natural Soil Bacteria Protocol. Triple rinse container and recycle

SECTION XIV: TRANSPORT INFORMATION

DOT SHIPPING NAME: Not classified as hazardous

TRANSPORT HAZARD CLASS: Not classified as hazardous

UN NUMBER: Not classified as hazardous HAZARD CLASS: Not classified as hazardous

PRIMARY HAZARD LABEL: Not classified as hazardous SUBSIDARY RISK LABEL: Not classified as hazardous

WHMIS CLASSIFICATION: Not classified as hazardous

MARINE POLLUTANT: contains natural soil bacteria and food grade ingredients (microbial

nutrients). Generally considered chemically inert in the environment

SECTION XV: REGULATORY INFORMATION

SARA 311/312: Not reportable

SARA 313: Not reportable, CERCLA: Not reportable

This product does not contain any ingredients on RCRA P or U lists of

Federal Hazardous Waste, This product does not contain any ingredients on the Clean Air Act (CAA) list of Hazardous Waste.

SECTION XVI: OTHER INFORMATION

TO THE BEST OF OUR KNOWLEDGE THIS INFORMATION IS TRUE AND ACCURATE. SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL. WE DO NOT ASSUME ANY RESPONSIBILITY FOR THE RESULTS OF ITS USE. THIS INFORMATION IS FURNISHED UPON THE CONDITION THAT THE PERSON RECEIVING THIS PRODUCT SHALL MAKE HIS / HER OWN DETERMINATION OF THE SUITABILITY OF THE MATERIAL FOR THEIR PARTICULAR PURPOSE. THIS INFORMATION IS PROVIDED IN GOOD FAITH BUT WITHOUT EXPRESSED OR IMPLIED WARRANTY. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO TAKE APPROPRIATE PRECAUTIONS.

DATE PREPARED: June 1 2015



NFPA HAZARD RATING

U.S. TRANSPORT SUMMARY

| 0 | Least | 205 | |
|---|----------|------|--------------|
| 1 | Slight | 1 | Health |
| 2 | Moderate | 0 | Flammability |
| 3 | High | 0 | Reactivity |
| 4 | Severe | ter. | |

Not regulated by the U.S. DOT as a hazardous material. See Section 14 for additional information.

SECTION 1: IDENTIFICATION

Product Name:

Droplex®

EPA Registration #:

Exempt

Product ID/Unity #: Common Name:

1414379, 1414380, 1445584 Spray drift control agent Spray drift control agent

Chemical Description: Recommended Uses: Restrictions for Use:

Adjuvant - See product label for full directions for use. See product label for any potential use restrictions.

Manufactured For:

WINFIELD SOLUTIONS, LLC

P. O. Box 64589 St. Paul, MN 55164-0589 MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs)

Non-Emergency Business Inquiries: 1-855-494-6343 Mon - Fri 8am - 5pm (Central Standard Time)

FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL: CHEMTREC 1-800-424-9300 (24 hours)

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Clear to hazy liquid with a mild odor. Based on currently available data, this product does not meet the regulatory definition of a hazardous chemical. However, good industrial hygiene practices should be used in handling the product.

POTENTIAL HEALTH EFFECTS:

Eyes: May cause mild but reversible eye irritation. Skin: May cause mild but reversible skin irritation.

Inhalation: May cause minor irritation of the upper respiratory tract.

Ingestion: May cause minor irritation of the digestive tract.

Preexisting Conditions: None known Chronic Health Effects: None known

IARC: Not listed NTP: Not listed Carcinogenicity

OSHA HCS 2012 CLASSIFICATION: This product does not meet the definition of a hazardous chemical under OSHA's Hazard

Communication Standard.

SIGNAL WORD: CAUTION

HAZARD STATEMENTS:

None required.

Percent of product with unknown toxicity: 0%

PRECAUTIONARY STATEMENTS:

Prevention: See Section 8 for personal protective equipment.

Response:

See Section 4 for first aid information. See Section 7 for storage information.

Storage: Disposal

See Section 13 for disposal information.

OSHA: Not listed

| Ingredient | % (wt) | CAS Reg. # |
|--|--------|------------|
| Benzenesulfonic acid, dodecyl-, calcium salt | <1.5% | 26264-06-2 |
| Propanol, 2-methyl- | <0.50% | 78-83-1 |

| HATERIAL SERVICE | SECTION 4: FIRST AID MEASURES | | | | | |
|------------------|--|--|--|--|--|--|
| Inhalation: | Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. | | | | | |
| Ingestion: | Seek medical attention or call a poison control center for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious | | | | | |
| | person. | | | | | |
| Eyes: | Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if eye irritation persists. | | | | | |
| Skin: | Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if skin irritation persists. | | | | | |

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Foam, Dry chemical, Carbon dioxide, Water fog

Unsuitable Extinguishing Media: Water jet. Use a water jet only to cool heated containers.

Special Fire Fighting Procedures: Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.

Hazardous Combustion Products: Asphyxiates such as carbon monoxide may result from combustion.

Unusual Fire and Explosion Hazards: Product will burn under fire conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Environmental Precautions: Keep spilled product from entering sewers or waterways.

Methods for Containment: Contain spilled product by diking area with sand or earth.

Methods for Clean-up: Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop, or sweep up material and place in a container for disposal. Do not place spilled material back in original container.

Other Information: None known

SECTION 7: HANDLING AND STORAGE

Handling: Ensure adequate ventilation during handling and use. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Storage: Store in cool, dry areas away from children, food and feed products in an area away from incompatible substances. Protect packaging from physical damage. Protect from exposure to fire. Maintain product above minimum storage temperature.

Minimum Storage Temperature: 32°F

Other Precautions: Consult Federal, state and local laws and regulations pertaining to storage.

| SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION | | | | | | |
|--|--------------|--------------|-----------|--|--|--|
| Exposure Guidelines Component: | OSHA PEL | ACGIH TLV | NIOSH REL | | | |
| Propanol, 2-methyl- (CAS # 78-83-1) | 50 ppm (TWA) | 50 ppm (TWA) | | | | |

Respiratory Protection: For most conditions, no respiratory protection should be needed. If airborne concentrations exceed exposure limits, use a NIOSH approved air-purifying respirator with cartridges/canisters approved for organic vapors.

exposure limits, use a NIOSH approved air-purifying respirator with cartridges/canisters approved for organic vapors.

Engineering Controls: Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne

concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is

preferred.

Protective Gloves: While not expected to cause skin irritation, the use of chemically protective gloves is recommended to prevent against skin contact.

Eye Protection: While not expected to cause eye irritation, the use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Other Protective Clothing or Equipment: Wear long-sleeve shirt, long pants and shoes plus socks to prevent skin contact. Work/Hygienic Practices: Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

| SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES | | | | | |
|---|-------------------------------------|-------------------------------|------------------------|--|--|
| Physical State: | Liquid | Specific Gravity (H₂O=1): | 0.874 - 0.884 | | |
| Vapor Pressure (mm Hg): | Not determined | Density (lbs/gallon): | 7.29 - 7.37 lbs/gallon | | |
| Vapor Density (Air=1): | Not determined | Melting Point/Freezing Point: | <10.4°F (<-12°C) | | |
| Solubility in Water (wt %): | Emulsifiable | Boiling Point/Range: | Not determined | | |
| Viscosity (centistokes): | 5-10 at 77°F (25°C) | pH: | Not determined | | |
| Appearance and odor: | Clear to hazy liquid with mild odor | Flash Point: | >212°F (100°C) | | |

SECTION 10: STABILITY AND REACTIVITY

Reactivity: None known

Chemical Stability: Product is stable at ambient temperature and pressure, under normal storage and handling conditions.

Possibility of Hazardous Reactions: Will not occur Conditions to Avoid: Extreme temperatures

Incompatible Materials: Strong acids, strong bases, strong oxidizing agents

Hazardous Decomposition Products: Asphyxiates such as carbon monoxide may result from combustion.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Eye Effects: May cause mild but temporary eye irritation. Animal tests showed the product to be a non-irritant.

Skin Effects: May cause mild but temporary skin irritation. Animal tests showed the product to be slightly

irritating. LD50 >5,050 mg/kg

Acute Inhalation Effects: Not determined
Acute Oral Effects: LD50 >5,000 mg/kg
Specific Target Organ None known

Toxicity:

CHRONIC TOXICITY

Chronic Effects: None known
Carcinogenicity: None known
Mutagenicity: None known
Teratogenicity: None known
Reproductive Toxicity: None known

POTENTIAL HEALTH EFFECTS:

Eyes: May cause mild but reversible eye irritation. Skin: May cause mild but reversible skin irritation.

Inhalation: May cause minor irritation of the upper respiratory tract.

Ingestion: May cause minor irritation of the digestive tract.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Not determined

ECOTOXICITY DATA:

Fish Acute and Prolonged Toxicity:
Aquatic Invertebrate Acute Toxicity:
Aquatic Plant Toxicity:
Bird Acute and Prolonged Toxicity:
Honeybee Toxicity:
Not determined
Not determined
Not determined

ENVIRONMENTAL EFFECTS:

Soil Absorption/Mobility:

Persistence and degradability:

Bioaccumulative Potential:

Other adverse effects:

Not determined
Not determined
Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

Waste: Dispose of in accordance with applicable Federal, state and local laws and regulations.

Container: Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations. RCRA Characteristics: It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

| | SECTION 14: TRANSPORT INFORMATION |
|------------------|---|
| DOT: (Ground) | This product is not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment. |
| IMDG: (Sea) | This product is not regulated by the IMDG code as a hazardous material for shipment by sea. |
| IATA: (Air) | This product is not regulated by the IATA as a hazardous material for air shipment. |
| TDG: (Canada) | This product is not regulated by the TDG as a hazardous material for ground shipment. |

SECTION 15: REGULATORY INFORMATION

TSCA Inventory: All components are listed on the TSCA inventory.

SARA Title III Information:

Section 302 - Extremely hazardous substances: None listed

Section 311/312 - Hazard Categories: None

Section 313 – The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:

None listed

CERCLA - This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

No component reportable quantities could be met with any practical quantity of product.

California Proposition 65: WARNING: This product contains a chemical known to the state of California to cause cancer and/or reproductive harm.

Continued on next page

U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):

Chemical Name

CAS#

State(s)

No components found

Canadian Domestic Substances List: Not determined

WHMIS Classification: Not classified as a hazard substance under WHIMS.

SECTION 16: OTHER

Disclaimer: The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions' knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

Revision Date: July 11, 2013

Supersedes document dated: April 2, 2012

Sections Revised: All

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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: 05-02-2017

Date Revised: 02-23-2017

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

1.1 Product Identifier

Trade Name: Paleo

Synonyms: Humic Acid, Potassium Salt

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

Recommended Uses: Plant Nutrition

Inadvisable Uses: None

1.3 Details of the Distributor of the Safety Data Sheet

Distributed By: Branch Creek Organics, LLC™

PO Box 523

Harleysville, PA 19438

888-408-5433

Country:

United States

1.4 In Case of Emergency: Infotrac at 800-535-5053

Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture:

CLP Classifier- Other Information: This Product Does Not Have to be Classified.

2.2 Label Elements: N/A2.3 Other Hazards: N/A2.4 OSHA PEL: None known2.5 ACGIH TLV: None known

2.6 GHS Label Elements: Non-Regulated Material

Section 3: Composition/Information on Ingredients

3.2 Mixtures

| Substance | CAS No | EC No | REACH Reg No | Concentration | Notes | DSD- Classification | CLP - Classification |
|-------------|--------|-------|-----------------|---------------|-------|------------------------|-------------------------|
| Proprietary | 1 | | | | | | |

Please see Section 16 for the full text of R-Phrases and H-Phrases

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 thoroughly and drink 1-2 glasses of water in small sips.

Skin Contact: Wash the skin with water. Remove contaminated clothing.

Eye Contact: Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed: None known

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed: None

Section 5: Fire-Fighting Measures

5.1 Special Fire Fighting Procedures: None

5.2 Fire and Explosion Hazards: None

5.3 Suitable Extinguishing Media: N/A

5.4 Unsuitable Extinguishing Media: N/A

Section 6: Accidental Release Measures

- **6.1 Personal Precautions:** Use personal protection recommended in Section 8.
- **6.2 Environmental Precautions:** Avoid infiltration of large quantities into drains, surface water, ground water and soil.
- **6.3 Methods and Material for Containment and Clean Up:** Sweep up/collect spills for possible reuse Or transfer to suitable waste containers.
- 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

- 7.1 Precautions for Safe Handling: No special requirements. Avoid contact with skin and eyes.
- 7.2 Storage: Recommended that product not be subject to freezing.

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters:

Occupational Exposure Limit: Contains no substances subject to reporting requirements.

8.2 Exposure Controls:

Appropriate Engineering: Provide sufficient ventilation during operations which cause vapour formation **Personal Protective Equipment:**

Eye Protection: Wear safety goggles if there is a risk of eye splash.

Hand Protection: Wear Gloves.

Skin Protection: Wear suitable protective clothing.

Respiratory Protection: Not Required

Section 9: Physical and Chemical Properties

9.1 Physical State/Appearance/Odor: Brown Liquid with slight odor.

9.2 Information on Basic Physical and Chemical Properties:

| Parameter | Value/Unit | Remark |
|---------------------------------------|--------------|---------------------------|
| pH (solution for use) | 2-3 | |
| pH (concentrate) | | Not Applicable |
| Melting Point | | Not Applicable |
| Initial Boiling Point | 104C/215F | |
| Freezing Point | -2C/28F | |
| Flash Point | | Not Applicable |
| Evaporation Rate | 0.4 | Water |
| Flammability (solid, gas) | | Not Applicable |
| Flammability Limits | | Not Applicable |
| Explosion Limits | | Not Applicable |
| Vapour Pressure | 14.2 mmHg | 20C/68F |
| Vapour Density(Air = 1) | 1.21 | 20C/68F |
| Relative Density | 1.109 | Specific Gravity(25C/77F) |
| Partition Coefficient N-Octonol/Water | | 100% Water |
| Auto-Ignition Temperature | | Not Applicable |
| Decomposition Temperature | | Not Applicable |
| Viscosity | < 600 cSt | |
| Odour Threshold | ppm | Not Applicable |
| Solubility in Water | 100% Soluble | |
| % Volatiles By Weight | 8o (Water) | |
| Bulk Density (g/ml) | | Not Applicable |

Section 10: Stability and Reactivity

10.1 Reactivity: Not Reactive

10.2 Chemical Stability: Stable

10.3 Possibility of Hazardous Reactions: None Known

10.4 Conditions to Avoid: None Known

10.5 Incompatible Materials: Strong Oxidizers

10.6 Hazardous Decomposition Products: None known

10.7 Hazardous Polymerization: Will Not Occur

Section 11: Toxicological Information

11.1 Information on Toxicological Effects:

Acute Toxicity – Oral

Humic Acid, Potassium Salt

Skin Corrosion/Irritation: May cause slight irritation

Serious Eye Damage/Eye Irritation: May cause slight irritation Respiratory Sensitization or Skin Sensitization: None known

Germ Cell Mutagenicity: Based on existing data, the classification criteria are deemed not to have been met.

Carcinogenic Properties: The product does not have to be classified.

Section 12: Ecological Information

12.1 Toxicity

12.2 Persistence and Degradability: Potentially degradable.

12.3 Bioaccumulative Potential: No bioaccumulation expected

12.4 Mobility in Soil: Solubility in water: Completely miscible

12.5 Results of PBT and vPvB Assessment: This product does not contain any PBT or vPvB substances.

12.6 Biological Oxygen Demand (BOD): Not known

12.7 Chemical Oxygen Demand (COD): Not known

12.8 Other Adverse Effects: None known

Section 13: Disposal Considerations

13.1 Waste Treatments Methods: This product is not to be considered Hazardous Waste.

Dispose of in accordance with Local Authority requirements.

Section 14: Transport Information

14.1 UN-No: Not applicable

14.2 UN Proper Shipping Name: Class 50

14.3 Transport Hazard Class(es): Not applicable

14.4 Packaging Group: Not applicable

14.5 Environmental Hazards: Not applicable

14.6 Special Precautions for User: None

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

Other Information: Harmonized Tariff Code for US: 3804.00.1000-0

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Special Provisions: ADR/RID (2007) ECHA FAQ 7.7. GHS/CLP (EC NO1272/2008) GHS USA June, 2015.

Authorizations / Limitations: Global Inventory Status

15.2 Chemical Safety Assessment: This product does not have to be classified.

Section 16: Other Information

16.1 HMIS Rating (0-4): Health=1 Fire=0 Reactivity=0 Special=0

Prepared by: Branch Creek Organics, LLC

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 Branch Creek Organics to be accurate at the time of preparation or obtained from sources believed to be generally reliable. However, Branch Creek Organics makes no warranty concerning their accuracy and Branch Creek Organics will not be liable for claims relating to any party's use of reliance on information or recommendations contained herein, regardless of whether it is claimed that the information or recommendations are inaccurate, incomplete or otherwise misleading.

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

Issue date 03/14/2016

Reviewed on 03/14/2016

1 Identification

- · Product Identifier
- · Trade name: Weed Shield
- · Relevant identified uses of the substance or mixture and uses advised against:

No further relevant information

- · Product Description Weed Killer
- · Details of the Supplier of the Safety Data Sheet:
- · Manufacturer/Supplier:

Branch Creek Organics, LLC®

P.O. Box 523

Harleysville, PA 19438

888-408-5433

branchcreekorganics.com

· Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) Identification

· Classification of the substance or mixture:

The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.

- · 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)



Health = 0 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 0

Reactivity = 0

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

3 Composition/Information on Ingredients

· Non-hazardous components:

7732-18-5 Water, distilled water, deionized water

127-08-2 Potassium Acetate

- · Chemical characterization: Mixtures
- · Description: Mixture: consisting of the following components.

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| · Dangerous Compon | nents: | |
|------------------------------------|---|--------|
| CAS: 8000-34-8 RTECS: GF6900000 | Clove oil (Eugenia Caryophyliata) Skin Irrit. 2, H315; STOT SE 3, H335 | 2-12% |
| CAS: 97-53-0 | Eugenol Acute Tox. 4, H302 | ≤ 2.5% |
| CAS: 57-13-6 RTECS: YR 6250000 | Urea | |
| CAS: 68513-95-1 | Soybean flour | |
| CAS: 68424-10-2 | Cottonseed Meal Acute Tox. 4, H302; STOT SE 3, H335 | |
| CAS: 68514-28-3 | Ful-Humix (Potassium Humate) Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335 | |
| | | |

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 several minutes under running water.
- · 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.

5 Fire Fighting Measures

- · Extinguishing media:
- · Suitable extinguishing agents:

CO₂, 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:

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: Not required.
- · Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

Dispose of the collected material according to regulations.

· Reference to other sections:

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and Storage

- · Handling
- · Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · 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 occupational exposure limits:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

8000-34-8 Clove oil (Eugenia Caryophyliata)

TWA Short-term value: 5 mg/m³

Long-term value: 10 mg/m³

57-13-6 Urea

WEEL Long-term value: 10 mg/m3

- · 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:

The usual precautionary measures for handling chemicals should be followed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

· Eye protection:



Goggles recommended during refilling.

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· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:

Liquid

Color:

Light brown Clove

· Odor: · Odor threshold:

Not determined.

· Change in condition

Melting point/Melting range:

Not determined.

Boiling point/Boiling range:

100 °C (212 °F)

· Flash point:

None

· Flammability (solid, gaseous):

Not applicable.

· Ignition temperature:

Not determined

· Decomposition temperature:

Not determined.

· Auto igniting:

Product is not self-igniting.

· Danger of explosion:

Product does not present an explosion hazard.

· Explosion limits:

Lower: Upper:

Not determined. Not determined.

Not determined.

· Vapor pressure:

· Density:

Relative density:

Not determined.

Vapor density: Evaporation rate: Not determined. 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:

· Other information:

No further relevant information available.

- · 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: No dangerous reactions known.
- · Conditions to avoid: No further relevant information available.
- · Incompatible materials: No further relevant information available.

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· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

- · Information on toxicological effects:
- · Acute toxicity:

| · LD/LC | 50 values that are relevant for classification: |
|---------|---|
| 8000-3 | 4-8 Clove oil (Eugenia Caryophyliata) |
| Oral | LD50 2650 mg/kg (rat) |
| Derma | I LD50 >5.000 mg/kg (rabbit) |
| 97-53- | 0 Eugenol |
| Oral | LD50 1930 mg/kg (rat) |
| F7 40 | O I I I |

57-13-6 Urea

Oral LD50 8471 mg/kg (rat)

- · Primary irritant effect:
- · On the skin: May cause an allergic skin reaction.
- · On the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · 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):

97-53-0 Eugenol

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· 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:

57-13-6 Urea

EC50 >10000 mg/l (daphnia)

- · 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.

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· 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.
- · 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:

Not applicable. Not applicable.

· Special precautions for user:

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code:

Not applicable.

· UN "Model Regulation":

Non-Regulated Material

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):

All ingredients are listed or exempt from listing.

- · 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.

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· 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 Special Hazardous Substance List:

None of the ingredients are listed.

· Carcinogenic categories:

· EPA (Environmental Protection Agency):

57-13-6 Urea

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· 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 Non-Regulated Material
- · Hazard pictograms: Non-Regulated Material
- · Signal word: Non-Regulated Material
- · Hazard statements: Non-Regulated Material
- · National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· 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: 03/14/2016 / 4

· 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Safety Data Sheet (SDS) OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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Reviewed on 03/14/2016

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Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

* Data compared to the previous version altered.

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106