

according to Federal Register Vol. 77, No. 8/March 26, 2012/Rules and Regulations
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SECTION 1: IDENTIFICATION

1.1 IDENTIFICATION

| | |
|-------------------------------|-----------------------------|
| Product form | Soil Amendment |
| Product name | Pivot Bio PROVEN™ |
| Synonyms | |
| Other means of identification | <i>Klebsiella variicola</i> |

1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST

| | |
|---------------------|--------------------------|
| Use of the Mixture: | Bacterial Soil Amendment |
|---------------------|--------------------------|

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Pivot Bio
2929 Seventh St, Suite 120
Berkeley, CA 94710

1.4 EMERGENCY TELEPHONE NUMBER

| | |
|------------------|---|
| Emergency number | For leak, fire, spill or accident emergencies, call: 1 800 / 424 9300 (CHEMTREC - U.S.A.) 1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries) Medical Emergencies: 1 800 / 331-3148 (PROSAR - U.S.A. & Canada) 1 651 / 632-6793 (PROSAR - All Other Countries - Collect) |
|------------------|---|

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (26 CFR 1910.1200).
According to the Globally Harmonized System (GHS) is not a dangerous substance or mixture.

2.2 LABEL ELEMENTS

Precautions and Safety Information

- Wear eye and skin protection when handling and wash hands after use;
- Keep out of reach of children;
- Contains live microorganisms and may cause adverse effects to persons with a compromised immune system;
- Avoid inhalation and contact with eyes, mouth, and broken skin.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Active ingredient: *Klebsiella variicola* 1x10⁸ CFU/g, <10% dry powder by wt.

Inert ingredients: >90% dry powder by wt.

SECTION 4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

- Eye contact:** Flush eyes with water for at least 15 to 20 minutes with eyelids separated. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye. Call a physician or poison control center for further treatment advice.
- Skin contact:** Immediately wash skin with water followed by washing with soap and water. Remove contaminated clothing.
- Inhalation:** If conscious, move person to fresh air. If unconscious, seek emergency medical attention.
- Ingestion:** If unconscious, seek emergency medical attention; never give anything by mouth to an unconscious person. If the person is conscious wash mouth out with water and call a physician or poison control center immediately for treatment advice. Have person sip water if able to swallow. Do not induce vomiting unless told to do so by a physician or poison control center.

SECTION 5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Suitable extinguishing media: Use extinguishing media appropriate for to the local and surrounding environment.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

None known.

5.3 PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Similar to any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

General measures: Avoid contact with skin and eyes.

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6.1.1 PATIENT/VICTIM

Wash with soap and water. Launder contaminated clothing separately and before re-use.

6.1.2 ENVIRONMENT

Keep people and animals away from spill/leak.

6.2 METHODES FOR CONTAINMENT AND CLEANING UP

For containment: Prevent further leakage or spillage if safe to do so. Absorb and/or contain spill with inert material, then place into a suitable container. Never return spills to original container for re-use.

Methods for cleaning up: Soak up spills with inert solids such as clay or diatomaceous earth as soon as possible. Take up in non-combustible absorbent material and shovel into container for disposal.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice. Do not contaminate other pesticides, fertilizers, water, or food or feed by storage or disposal.

Storage: Follow instructions on label for proper storage. Keep out of reach of children/animals. Keep/store in original containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: This product, as supplied does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

Exposure Limits: No exposure limits for this material have been established by ACGIH, NIOSH, or OSHA.

Engineering Controls: Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.) ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures:

Eye/Face Protection: For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection: Wear suitable protective clothing. Protective shoes or boots.

Hand Protection: Protective gloves

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- Respiratory Protection:** For dust, splash, mist or spray exposures wear a filtering mask.
- Hygiene measures:** Clean water should be available for washing in case of eye or skin contamination. Remove and wash contaminated clothing before re-use. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Launder work clothing separately from regular household laundry.
- General information:** These recommendations apply to the product as supplied. Please refer to the product label for additional Personal Protective Equipment advisories.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

| | |
|--------------------------------------|--------------------------|
| Appearance: | Powder |
| Physical State: | Dry powder |
| Color: | Beige |
| Odor: | Fermented |
| Odor threshold: | No information available |
| pH: | No information available |
| Melting point/freezing point: | Not applicable |
| Boiling Point/Range: | No information available |
| Flash point: | Not applicable |
| Evaporation Rate: | No information available |
| Flammability (solid, gas): | No information available |
| Flammability Limit in Air: | No information available |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Vapor pressure: | No information available |
| Vapor density: | No information available |
| Density: | No information available |
| Specific gravity: | No information available |
| Water solubility: | Soluble in water |
| Solubility in other solvents: | No information available |
| Partition coefficient: | No information available |
| Autoignition temperature: | No information available |
| Decomposition temperature: | No information available |
| Viscosity, kinematic: | No information available |
| Viscosity, dynamic: | No information available |
| Explosive properties: | No information available |
| Oxidizing properties: | No information available |
| Molecular weight: | No information available |
| Bulk density: | No information available |

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SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not applicable
Chemical Stability: Stable under recommended storage conditions
Possibility of Hazardous Reactions: None under normal processing
Hazardous polymerization: Hazardous polymerization does not occur
Conditions to avoid: None known
Incompatible materials: None known
Hazardous Decomposition Products: None known based on information supplied

SECTION 11. TOXICOLOGICAL INFORMATION

Route of Exposure

Eye Contact: Data not available
Skin Contact: Non-toxic
Skin Absorption: Data not available
Inhalation: Data not available
Ingestion: Data not available
Parenteral Exposure: Data not available

Sensitization

Skin: Non-sensitizing
Respiratory: Data not available
Target Organ(s) or System(s): Data not available

Signs and Symptoms of Exposure

Skin and Mucous Membranes: Data not available
Respiratory: Data not available
Gastrointestinal: Data not available
Toxicity Data: Data not available
Effects of Long Term or Repeated Exposure: Data not available
Chronic Exposure–Teratogen: Data not available
Chronic Exposure–Mutagen: Data not available
Chronic Exposure–Reproductive Hazard: Data not available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability: Biodegradable; not persistent.
Bioaccumulation: No information available.
Mobility: No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods: Dispose of in accordance with local regulations.
Contaminated Packaging Containers: must be disposed of in accordance with local, state and federal regulations.
Refer to the product label for container disposal instructions.

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SECTION 14. TRANSPORT INFORMATION

DOT: Not regulated
TDG: Not regulated
ICAO/IATA: Not regulated
IMDG/IMO: Not regulated

SECTION 15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|----|
| Acute health hazard | No |
| Chronic health hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65: This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations: This product does not contain any substances regulated by state right-to-know regulations.

International Inventories: This product does not contain any substances on the International Inventories.

WHMIS Statement: This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

WHMIS Hazard Class See section 2 for more information.



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510 261 2072

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SECTION 16. OTHER INFORMATION

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DISCLAIMER: Pivot Bio believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. The information provided herein is to our best present knowledge correct and complete and is given in good faith but without warranty. The information relates only to the specified product designated and should not be construed as guaranteeing any specific property of the product where such product is used in combination with any other materials or in any process.

Prepared By: Pivot Bio