



RETURN® LIF Safety Data Sheet

Revision date: March 28, 2025

SECTION 1: IDENTIFICATION

Product name: Pivot Bio RETURN® LIF

Other means of identification: *Klebsiella variicola* 137-1036, Kv137-1036

Product use: Soil Inoculant

Supplier:

Pivot Bio
2910 Seventh Street
Berkeley, CA 94710
www.pivotbio.com

Emergency number: (877)451-1977

SECTION 2: HAZARDS IDENTIFICATION

This material is not a physical, health, or environmental hazard. Use according to the label instructions. For industrial and commercial agricultural use only.

POTENTIAL HEALTH EFFECTS:

Eyes: Use safety goggles. Minor and temporary irritation may occur with direct exposure. Clearance is expected with no long-term health effects. Consult with physician if irritation persists.

Skin: Do not expose open cuts or wounds to the product. Use chemical resistant protective gloves. Minor and temporary irritation may occur. Clearance is expected with no long-term health effects. Consult with physician if irritation persists.

Inhalation: Use in a well-ventilated area. Minor and temporary irritation may occur. Clearance is expected with no long-term health effects. Consult with physician if irritation persists.

Ingestion: Do not ingest.

SECTION 3: COMPOSITION/INGREDIENT INFORMATION

Active ingredients:

Klebsiella variicola 137-1036
≥4x10⁸ CFU/mL (<2% by wt.)

Inert ingredients:

Inert ingredients (>98% by wt.)



RETURN® LIF Safety Data Sheet

SECTION 4: FIRST AID MEASURES

Eye contact: Flush eyes with clean water for 20 minutes with eyelids separated. Remove contact lenses after first five minutes, then continue rinsing the eyes.

Inhalation: Move person to fresh air. If person is not breathing, call an ambulance and provide artificial respiration, if possible.

Skin contact: Remove contaminated clothing. Wash skin thoroughly with soap and water for 20 minutes.

Ingestion: Wash mouth out with water. Call poison control or physician for treatment advice. Do not induce vomiting unless instructed by physician or poison control. Have person slowly sip drinking water if able to swallow.

SECTION 5: FIRE FIGHTING MEASURES

Flash point: None

Auto-ignition temperature: Not determined

Explosive limits: Not applicable

Firefighting instructions: No special requirements

Extinguishing media: Use media suitable for surrounding fire

Unusual fire or explosive hazards: None known

SECTION 6: ACCIDENTAL RELEASE MEASURES

Methods for cleaning up: Wear gloves and cover the spill area with absorbent towel. Pour liquid disinfectant, such as freshly prepared 10% bleach solution, over the covered spill area allowing it to mix with spilled material for 10 minutes. Using scoops or cardboard, scoop up the material and discard it into waste container for disposal into municipal waste. Clean contaminated floors and surfaces thoroughly with water and detergents, observing environmental regulations. Remove gloves and wash hands with clean water and soap.

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with eyes. Use in well-ventilated areas. Wash hands thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with skin.

Storage: Store in original container in a cool, well-ventilated, dry area at temperature between 32°F (0°C) and 70°F (21°C). Keep out of reach of children and animals.



RETURN® LIF Safety Data Sheet

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection: Use product in well-ventilated area. Wear an appropriate respirator, if necessary, based on the scale, activity, and controls used in downstream processing. Large scale operations may necessitate the use of a respirator. Use a NIOSH/MSHA certified respirator if exposure limits are exceeded or for irritation if dust is generated. Follow OSHA or other applicable federal, state, and local regulations.

Skin and body protection: Chemical resistant protective gloves should be worn to prevent repeated or prolonged contact with the liquid.

Eye/face protection: Use safety goggles.

Hygiene measures: Wash hands and face prior to eating, drinking, chewing gum, or using tobacco. Clean water should be available for washing in case of eye or skin contamination. Remove and wash contaminated clothing before re-use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Odor: Mild, fermented

Color: Light tan

pH: Not available

Vapor pressure: Not available

Vapor density: Not available

Melting point/freezing point: Not applicable

Boiling point/range: Not available

Water solubility: Soluble in water

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions. Refer to the label for shelf life and expiration.

Hazardous polymerization: Will not occur.

Hazardous decomposition products: None known based on information supplied.

SECTION 11: ECOLOGICAL INFORMATION

This product contains naturally occurring soil bacteria.



RETURN® LIF Safety Data Sheet

SECTION 12: DISPOSAL CONSIDERATIONS

Dispose of unused product, empty containers, and residues in accordance with local and state regulations.

SECTION 13: TRANSPORT INFORMATION

This product is not regulated as a hazardous material for transportation within the U.S. by any means of transportation.

SECTION 14: 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.

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.

WHIMS 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.



RETURN® LIF Safety Data Sheet

SECTION 15: OTHER INFORMATION

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 Pivot Bio's 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.