

Issue Date: 04-Nov-2020

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Version 5

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** United 84 Wastewater Plant Freeze-Dried Bacteria In a Spore State

### Other means of identification

**SDS #** UNITED-84

### Recommended use of the chemical and restrictions on use

**Recommended Use** WWTP Freeze-Dried Bacteria In a Spore State

**Uses Advised Against** For industrial and institutional use only.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

United Laboratories, Inc.  
320 37th Avenue  
St. Charles, IL 60174  
www.unitedlabsinc.com

### Emergency Telephone Number

**Company Phone Number** 800-323-2594 (to reorder)  
**Emergency Telephone (24 hr)** INFOTRAC 1-800-535-5053 (North America)  
1-352-323-3500 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Tan dry material

**Physical State** Solid

**Odor** Pleasant

### OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification

Combustible dusts.

### GHS Label Elements

**Signal Word:** Warning

**Hazard Statements:** May form combustible dust concentrations in air.

### Precautionary Statements

Prevention: Not applicable.

Response: Not applicable.

Storage: Not applicable.

Disposal: Not applicable.

**Supplemental label elements:** Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

**Hazards not otherwise classified:** None known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance/Mixture	Other identification
Mixture	No information available

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available are listed in Section 8.

**4. FIRST-AID MEASURES**

**First Aid Measures**

- Eye Contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse at least 10 minutes. Get medical attention if irritation occurs.
- Skin Contact** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**

- Potential acute health effects**
  - Eye contact:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
  - Inhalation:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
  - Skin contact:** No known significant effects and critical hazards.
  - Ingestion:** No known significant effects and critical hazards.
- Over-exposure signs/symptoms**
  - Eye contact:** Adverse symptoms may include the following: irritation/ redness
  - Inhalation:** Adverse symptoms may include the following: respiratory tract irritation/coughing
  - Skin contact:** No specific data
  - Ingestion:** No specific data

**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. **Specific treatments:** No specific treatment. **Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Use dry chemical powder.

**Unsuitable Extinguishing Media** Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

### Specific Hazards Arising from the Chemical

May form explosible dust-air mixture if dispersed.

### Hazardous Thermal Decomposition Products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, halogenated compounds and metal oxide/oxides.

### 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 personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

### 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.

## 6. ACCIDENTAL RELEASE MEASURES

### 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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".

**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).

### Methods and material for containment and cleaning up

**Small Spill** Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined area. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Protective measures**

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

**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.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions and Incompatible Materials**

Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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. See Section 10 for incompatible materials before handling or use.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Appropriate engineering controls**

**Engineering Controls**

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental Exposure Controls**

Emissions 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.

**Individual protection measures, such as personal protective equipment**

**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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating condition as cause high dust concentrations to be products, use dust goggles.

**General Hygiene Considerations** 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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Skin Protection**  
**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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body Protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**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**

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Solid	<b>Odor</b>	None
<b>Appearance</b>	Tan dry material in water-soluble packet	<b>Odor Threshold</b>	Not available
<b>Color</b>	Tan		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	Not available		
<b>Melting Point</b>	Not available		
<b>Boiling Point</b>	Not available		
<b>Flash Point</b>	Closed cup: Not applicable	(Product does not sustain combustion)	
<b>Evaporation Rate</b>	Not available		
<b>Flammability (Solid, Gas)</b>	Not available		
<b>Upper Flammability Limits</b>	Not available		
<b>Lower Flammability Limit</b>	Not available		
<b>Vapor Pressure</b>	Not available		
<b>Vapor Density</b>	Not available		
<b>Relative Density</b>	Not available		
<b>Solubility</b>	Not available		
<b>Partition Coefficient</b>	Not available		
<b>Auto-ignition Temperature</b>	Not available		
<b>Decomposition Temperature</b>	Not available		
<b>Viscosity</b>	Not available		
<b>VOC Content</b>	None		

**10. STABILITY AND REACTIVITY**

**Reactivity**

No specific test data related to reactivity available for this product or its ingredients.

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**Chemical Stability**

The product is stable.

**Possibility of Hazardous Reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to Avoid**

Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

**Incompatible Materials**

No specific data.

**Hazardous Decomposition Products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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**11. TOXICOLOGICAL INFORMATION**

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**Information on toxicological effects**

**Acute toxicity:** Not available

**Irritation/Corrosion:** Not available

**Sensitization:** Not available

**Mutagenicity:** Not available

**Carcinogenicity:** Not available

**Reproductive toxicity:** Not available

**Teratogenicity:** Not available

**Specific target organ toxicity (single exposure):** Not available

**Specific target organ toxicity (repeated exposure):** Not available

**Aspiration hazard:** Not available

**Information on the likely routes of exposure**

Routes of entry anticipated: Dermal, Inhalation.

Routes of entry not anticipated: Oral.

**Potential acute health effects**

<b>Eye contact:</b>	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
<b>Inhalation:</b>	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
<b>Skin contact:</b>	No known significant effects or critical hazards.
<b>Ingestion:</b>	No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Eye contact:</b>	Adverse symptoms may include the following: irritation /redness.
<b>Inhalation:</b>	Adverse symptoms may include the following: respiratory tract irritation / coughing.
<b>Skin contact:</b>	No specific data.
<b>Ingestion:</b>	No specific data.

**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**

Not available

**General:** Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

**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.

**Numerical measures of toxicity**

**Acute toxicity estimates-** Not available

**12. ECOLOGICAL INFORMATION**

**Toxicity**

No information available.

**Persistence/Degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility in soil**

**Soil/water partition coefficient (Koc):** No information available

**Other Adverse Effects**

No known significant effects or critical hazards.

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal of Wastes**

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.

**Contaminated Packaging**

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. Care should be taken when handling emptied containers that have been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**14. TRANSPORT INFORMATION**

**DOT**

Not regulated.

**IATA**

Not regulated.

**IMDG** Not regulated.

**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.

**Transport to bulk according to Annex II of MARPOL and the IBC Code** Not available.

**15. REGULATORY INFORMATION**

**US Federal Regulations**

**TCSA 8(a) CDR Exempt/Partial exemption:** Not determined. **Clean Water Act (CWA) 307:** tetrasodium hexacyanoferrate.

**Clean Air Act**

Section 112	(b) Hazardous Air Pollutants (HAPs)	Listed.
Section 602	Class I Substances	Not listed
Section 602	Class II Substances	Not listed

**DEA**

List I Chemicals	Precursor Chemicals	Not listed
List II Chemicals	Essential Chemicals	Not listed

**US State Regulations**

Massachusetts	New York	New Jersey	Pennsylvania
None of the components listed.	None of the components listed.	None of the components listed.	None of the components listed.

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ:** Not applicable.

**SARA 311/312**

**Classification:** Combustible dusts

**Composition/information on ingredients**

No products were found.

**California Prop. 65** – This product does not require a Safe Harbor warning under California Prop.65.

**International Regulations**

<b>Chemical Weapon Convention List Schedules I, II, &amp; III Chemicals</b>	Not listed.
<b>Montreal Protocol (Annexes A, B, C, E)</b>	Not listed.
<b>Stockholm Convention on Persistent Organic Pollutants</b>	Not listed.
<b>Rotterdam Convention on Prior Information Consent (PIC)</b>	Not listed.
<b>UNECE Aarhus Protocol on POPs and Heavy Metals</b>	Not listed.



**International Lists**  
**National Inventory**

Australia	Not determined.
Canada	Not determined.
China	Not determined.
Europe	Not determined.
Japan – (ENCS – ISHL)	ENCS/ISHL:At least one component is not listed.
Malaysia	Not determined.
New Zealand	Not determined.
Philippines	Not determined.
Republic of Korea	Not determined.
Taiwan	Not determined.
Thailand	Not determined.
Turkey	Not determined.
United States	All components are listed or exempted
Viet Nam	Not determined.

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	2	0	0	Not determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	0	3	0	B

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**