

MATERIAL SAFETY DATA SHEET

ECOLOGICAL LABORATORIES, INC., P.O. BOX 132, 215 N. Main St., Freeport, NY 11520 USA
Phone: 516-379-3441 Fax: 516-379-3632 email: info@microbelift.com
FOR EMERGENCY CALL CHEMTREC – DAY OR NIGHT 800-424-9300 or OUTSIDE USA 202-483-7616

PRODUCT IDENTIFICATION

Material Name: Microbe-Lift Maximum Clarity (Part 1)
Brand Name: Baking Soda
Chemical Name: Sodium Bicarbonate
Common Name: Sodium Bicarbonate
Formula: NaHCO₃
CAS Number: 144-55-8 (of NAHCO₃)

PHYSICAL AND CHEMICAL PROPERTIES

State: Granular Solid
Melting Point C: Loses CO₂ at 270 C
Boiling Point C: Decomposes
Color: White
Odor: None
Bulk Density, lb/cubic ft.: 60
Weight per gallon: Not applicable
Specific Gravity @ 20 C: 2.16
Water Solubility, % by wt. @20 C: 8.8
Flash Point and Method: Not applicable
pH: Not applicable

HAZARDOUS INGREDIENTS

Hazard: Mild irritant to eyes and skin

PHYSICAL HAZARD INFORMATION

EXPLOSIVE: NO
PYROPHORIC: NO
FLAMMABLE: NO
COMBUSTIBLE: NO
OXIDIZER: NO
REACTIVITY: Normally stable in dry air, In moist air, forms sodium carbonate, an irritant.
INCOMPATIBILITIES: Keep away from acids, aluminum, and phosphorous pentoxide.
HAZARDOUS: Decomposes when exposed to high heat, releasing carbon dioxide. Carbon dioxide gas is an esphyxiant and may affect respiration rate.
CONDITIONS TO AVOID: Exposure to incompatible materials and heart.

HEALTH INFORMATION

PRECAUTIONARY INFORMATION: This product is a mild irritant to eyes and skin.

Symptoms of Exposure: Irritation or redness of the eyes and skin.

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PRODUCT IDENTIFICATION

Material Name: Microbe-Lift Maximum Clarity (Part 2)

HAZARDOUS INGREDIENTS

Bacterial Cultures: less than 1% by weight.
Blend of naturally occurring ingredients as a carrier including, corn and wheat bran. 70%
Hazardous ingredient: Sodium Bicarbonate
% Concentrate: 30
Classification: n/a
Exposure: n/a
CAS: 144-55-8
EINECS: 205-633-8

HAZARDOUS IDENTIFICATION

Classification: Bacterial culture non pathogenic

FIRST AID MEASURES

Immediate medical attention is required in case of exposure by inhalation, contact with skin or eyes, or if swallowed.

Exposure	Symptom	Treatment
Inhalation	Same as exposure to dust. May cause respiratory tract irritation.	Remove from exposure, rest and keep warm. In severe cases, or if recovery is not rapid or complete seek medical attention.
Skin Contact	Redness and irritation	Drench the skin with plenty of water. Remove contaminated clothing and wash before reuse. If large areas of skin are damaged or if irritation persists seek medical attention.
Eye Contact	Same as dust	Irrigate thoroughly with water for at least 10 minutes. Obtain medical attention. Ingestion
Ingestion	Irritation of gastrointestinal tract, nausea, diarrhea	Wash out mouth with water. Do not induce vomiting. If patient is conscious, give water to drink. If patient feels unwell seek medical attention.

Immediate Treatment / Antidote: symptomatic treatment

Delayed Effects: bacterial infection

FIRE FIGHTING MEASURES

Suitable Extinguishers: water

Unsuitable Extinguishers: n/a

Hazardous Combustion Products: none in normal use. Large dust accumulations can be explosive, similar to a grain dust explosion.

Special Equipment for Fire Fighting: self contained breathing apparatus

ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate PPE – See Exposure Controls/personal protection section.

Environmental Precautions: The bacteria and carriers are naturally occurring and should not pose an environmental risk.

Clean up Procedure: Vacuum or sweep up avoiding generation of dust. Place in suitable labeled containers and hold for waste disposal. Wash spill site with water. If bacterial contamination is an issue use chlorine to kill the bacillus spores.

HANDLING AND STORAGE

Handling Ventilation: Good general ventilation.
Recommended procedures & equipment: avoid creating dust

Storage Temperature range: 0 deg C to 40 deg C for product viability only.
Humidity range: less than 40% for long term exposure of unprotected product for product viability only.

Keep away from: See Stability and Reactivity section.

Suitable storage Media: original container with closed lid

Precautions against static discharge: recommended.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure standards:

Component	LTEL (8h TWA)	STEL (15mins)	Type	None
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Personal Protective Equipment:

Respiratory: Dust mask

Hand: Wash hands after use. Gloves recommended.

Eye: Safety glasses or goggles recommended.

Skin: Wash after exposure. Overalls and boots recommended.

Environmental controls: Users should be aware of environmental considerations and their duties under the environmental protection act.

Hygiene Measures: Always wash thoroughly after handling chemicals.

PHYSICAL & CHEMICAL PROPERTIES

Appearance: Brown free-flowing powder

Odor: Yeast like odor

pH: Neutral 6.0 to 7.0 in water dispersion

Boiling Point/range Not applicable

Melting Point/range Not applicable

Flash point Not applicable

Flammability Not flammable under normal conditions of storage and handling.

Autoignition temperature Not applicable

Explosive limits N/A except in presence of large dust cloud

Oxidizing Properties Non

Vapour Pressure Not applicable

Relative density 0.6 to 0.8

Solubility in water Not soluble. Disperses in water.

Solubility in solvent Not soluble.

Partition coefficient Not applicable

Viscosity Not applicable

Vapour density Not applicable

Evaporation rate Not applicable
Conductivity Not applicable

STABILITY & REACTIVITY

Stability: Stable under normal storage and handling conditions.
Conditions to avoid: Accumulations of product in enclosed spaces, generation of dust, and excess heat.
Materials to avoid: Acids and Alkalies may inactivate the bacterial cultures.
Hazardous decomposition products: oxides of carbon

TOXICOLOGICAL INFORMATION

Toxological effects: Low acute oral toxicity although ingestion will cause irritation of the gastrointestinal tract and may result in nausea and diarrhea. May cause mild mechanical irritation to eyes, skin, and mucous membranes. May cause irritation from allergic reaction, especially to people that have a history or allergic reaction.

ECOLOGICAL INFORMATION

Environmental Effects: Minimal impact under normal conditions of use and storage. The bacterial cultures are naturally occurring soil type organism. The carriers are naturally occurring materials.
Mobility: disperses in water
Degradability: contents are biodegradable
Bioaccumulative potential: Not known

DISPOSAL CONSIDERATIONS

Substance: Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Container: As substance.

TRANSPORT INFORMATION (Not regulated for transport)

Proper shipping name: Waste water treatment compounds, bacterial culture.

REGULATORY INFORMATION

Label Name Microbe-Lift Maximum Clarity
Symbols no risk or safety phrases stipulated
Risk Phrases no risk or safety phrases stipulated
Safety Phrases no risk or safety phrases stipulated
E.C. No

Additional labeling:
Use of this material may be governed by the following regulations: (users are advised to consult these regulations for further information.)

Legal Disclaimer:

The above information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, OR USE OF THE PRODUCT.

Restrictive Medical Conditions: Eye or skin disease and breathing or respiratory disorder will be aggravated by exposure to this chemical.

PRIMARY ROUTE(S) OR ENTRY

Eye and skin contact, inhalation (breathing), and ingestion (swallowing).

TOXICITY INFORMATION

Oral – rat LD50 4220 mg/kg; Oral – Infant LDLo 1260 mg/kg; Skin irritation – rabbit 30 mg/3 days, mild.

EXPOSURE LIMITS

OSHA: Not established
ACGIH: Not established
Other: ACGIH: TLV-TWA for nuisance dust is 10 mg/m³ total dust for 5 mg/m³ respirable dust.

Not reported as a Carcinogen or Potential Carcinogen

PRECAUTIONS FOR SAFE HANDLING AND USE

Avoid contact with eyes, skin, and clothing.
Avoid breathing dust.
Avoid contact with acids.
Store in a cool, dry area.
Wash thoroughly after handling.

SPILL AND LEAK PROCEDURES

Soil Release: Shovel and sweep up. Dispose of in accordance with federal, state and local regulations.

Water Spill: Dilute and disperse with water jets, propellers or similar agitation techniques.

Air Spill: Keep unwind. Treat impact site as appropriate for soil or water spill.

Occupational: Shovel and sweep up and place in a container for disposal.

**RCRA Waste:
Number** Not applicable

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation: Use general dilution and local exhaust ventilation techniques to meet nuisance dust exposure limit.

Respirator: Use NIOSH/MSHA approved dust type respirator.

Eye Protection: No special requirements.

Gloves: No special requirements.

Clothing: Good hygiene practices.

EMERGENCY PROCEDURES

Fire: This product is not flammable and does not support combustion.

Spill or Leak: Sweep up and shovel into containers for later disposal.

FIRST AID PROCEDURES

Ingestion: If swallowed, do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.

Skin Contact: Flush with plenty of water. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Note to Physician: The chemical of exposure is sodium bicarbonate with has a pH of 8.