

SAFETY DATA SHEET

Section 1. Identification

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| Product Identifier | NitaBiome microbiome collection tubes: cat no: NBK001, NitaBiome microbiome collection buffer: cat no: NBB020, NBB050 |
| Application | Stabilization of microbes and DNA |
| Supplier/Manufacturer | NitaBiome Inc, a subsidiary of mediXgraph Inc 29528 Union City Blvd, Union City, CA 94587 USA Email: info@nitabiome.com Website: http://nitabiome.com/ Emergency Telephone Number For information US call: +1-805-296-2757 |

Section 2. Hazards Identification

Classification This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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| Flammable liquids | Category 3 |
| Serious Eye Damage/Eye Irritation | Category 2A |
| Specific target organ toxicity (single exposure) (Narcotic effects) | Category 3 |
| Specific target organ toxicity - (repeated exposure) (Target Organs - Kidney, Liver) | Category 2 |

GHS Label elements

Hazard pictograms



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| Signal word | Warning |
| Hazard statements | H226 - Flammable liquid and vapor H319 - Causes serious eye irritation. H336 - May cause drowsiness and dizziness. |
| Prevention | Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. |
| Responses | IF INHALED: Remove person to fresh air and keep |

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| | comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. |
| Storage | Store in a well-ventilated place. Keep container tightly closed Store locked up. Keep cool. |
| Disposal | Dispose of contents/container to an approved waste disposal plant |
| Hazards not otherwise classified (HNOC) | |
| Physical hazards not otherwise classified (PHNOC) | None known |
| None known. Health hazards not otherwise classified (HHNOC) | None known |

Section 3. Composition/information on ingredients

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| Substance/mixture | Mixtures |
| Other means of identification | Not available |
| CAS number/other identifiers | |
| CAS number | Not applicable |
| Product code | Not available |
| Ingredient name | Isopropyl alcohol < 30% CAS No: 67-63-0 Bromothymol Blue < 5% CAS No: 76-59-5 |
| Any concentration shown as a range is to protect confidentiality or is due to batch variation. | |
| There are no additional 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. | |

Section 4. First aid measures

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| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur. |
| Inhalation | Move to fresh air. Obtain medical attention. If not breathing, give artificial respiration. |
| Ingestion | Do not induce vomiting. Obtain medical attention |
| Most important symptoms and effects | Breathing difficulties. May cause central nervous system depression: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. |
| 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 |

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| | suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
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Section 5. Fire-fighting measures

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| Suitable extinguishing media | Use dry chemical, CO ₂ , water spray (fog) or foam |
| Unsuitable extinguishing media | Do not use water jet or water-based fire extinguishers. |
| Specific hazards arising from the chemical | Combustible liquid. |
| Hazardous thermal decomposition products | Decomposition products may include the following materials: carbon dioxide carbon monoxide |
| Special protective actions for fire-fighters | 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. |

Section 6. Accidental release measures

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| Personal precautions, protective equipment and emergency procedures | |
| For non-emergency personnel | 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 vapor or mist. 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 nonemergency 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 materials for containment and cleaning up | |
| Spill | Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, watercourses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

Section 7. Handling and storage

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| Personal 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 vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities 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. Store locked up. 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.
Store at 15°C to 30°C

Section 8. Exposure controls/Personal Protection

Control parameters
United States
Occupational exposure limits

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL(TWA) |
|-------------------|-------------------------------|--|---|--|
| Isopropyl alcohol | TWA: 200 ppm STEL: 400 ppm | Vacated) TWA: 400 ppm (Vacated) TWA: 980 mg/m ³ (Vacated) STEL: 500 ppm (Vacated) STEL: 1225 mg/m ³ TWA: 400 ppm TWA: 980 mg/m ³ | IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³ | TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³ |

Section 9. Physical and Chemical Properties

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| Appearance | |
| Physical state | Liquid |
| Color | Blue |
| Odor | Odorless |
| Odor threshold | Not available |
| pH | 10.5 |
| Melting point | Not available |
| Boiling point | Not available |
| Flash pint | Not determined |
| Evaporation rate | Not available |
| Flammability (solid, gas) | Not available |

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| Lower and upper explosive (flammable) limits | Not available |
| Vapor pressure | Not available |
| Vapor density | Not available |
| Relative density | Not available |
| Solubility | Not available |
| Partition coefficient; n-octanol/water | Not available |
| Auto-ignition temperature | Not available |
| Decomposition temperature | Not available |
| Viscosity | Not available |
| Volatility | Not available |

Section 10. Stability and reactivity

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| Reactivity | No specific test data related to reactivity available for this product or its ingredients. |
| Chemical Stability | This product is stable. |
| Possibility of hazardous reaction | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Condition to avoid | Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| Incompatible materials | Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis. |
| Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11. Toxicological information

Acute toxicity

Product information

(a) Component information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------|------------------|---|----------------------|
| Isopropyl alcohol | 5840 mg/kg (Rat) | 13900 mg/kg (Rat) 12870 mg/kg (Rabbit) | 72.6 mg/L (Rat) 4 hr |

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| Toxicologically Synergistic Products | No information available |
| Chemical Stability | This product is stable. |
| Irritation | Irritating to eyes and skin. |
| Sensitization | No information available. |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|-------------------|---------|------------|------------|------------|------------|------------|
| Isopropyl alcohol | 67-63-0 | Not listed | Not listed | Not listed | Not listed | Not listed |

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|-----------------------|---|
| Mutagenic Effects | No information available |
| Reproductive Effects | No information available |
| Developmental Effects | No information available |
| Teratogenicity | No information available |
| STOT-single exposure | Respiratory system Central nervous system (CNS) |

Product information

(b) Component information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------------|-----------|-------------|-----------------|
| Bromothymol blue | No data | No data | No data |

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| Skin irritation or corrosion | May cause irritation |
| Eye irritation or corrosion | May cause irritation |
| Sensitization | No sensitizing effects known |
| Germ cell mutagenicity | No effects known |
| Carcinogenicity | No classification data on carcinogenic properties of this material |
| Reproductive toxicity | No effects known |
| Aspiration hazard | No effects known |
| Subacute to chronic toxicity | No effects known |

Section 12. Ecological Information

Ecotoxicity

Do not empty into drains.

(a) Component information

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-------------------|--|--|--|---|
| Isopropyl alcohol | EC50: > 1000 mg/L, 72h (Desmodesmus subspicatus) EC50: > 1000 mg/L, 96h (Desmodesmus subspicatus) | LC50: > 1400000 µg/L, 96h (Lepomis macrochirus) LC50: = 9640 mg/L, 96h flow-through (Pimephales promelas) LC50: = 11130 mg/L, 96h static (Pimephales promelas) | = 35390 mg/L EC50 Photobacterium phosphoreum 5 min | 13299 mg/L EC50 = 48 h 9714 mg/L EC50 = 24 h |

Persistence and Degradability Persistence is unlikely based on information available

Bioaccumulation/ Accumulation No information available

Mobility Will likely be mobile in the environment due to its volatility.

| Component | LogP _{ow} |
|-------------------|--------------------|
| Isopropyl alcohol | 0.05 |

(b) Component information

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|------------------|------------------|-----------------|----------|------------|
| Bromothymol blue | No data | No data | No data | No data |

Persistence and Degradability No relevant information available

Bioaccumulation/ Accumulation No relevant information available

Mobility in soil No relevant information available

Additional ecological information

General Notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow large quantities to reach ground water or sewage systems. Avoid transfer into the environment.

Section 13. Disposal consideration

Disposal methods The generation of waste should be avoided or minimized wherever

possible. Disposal of this product, solutions and any by-products should 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. 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 empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

DOT

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|----------------------|---------------|
| UN-Number | No regulated |
| Proper shipping name | Not available |
| Hazard Class | Not available |
| Packing Group | Not available |
| Environmental hazard | No |

TDG / NOM-003-SCT

| | |
|----------------------|---------------|
| UN-Number | No regulated |
| Proper shipping name | Not available |
| Hazard Class | Not available |
| Packing Group | Not available |
| Environmental hazard | No |

IMDG

| | |
|----------------------|---------------|
| UN-Number | No regulated |
| Proper shipping name | Not available |
| Hazard Class | Not available |
| Packing Group | Not available |
| Environmental hazard | No |

IATA

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|----------------------|---------------|
| UN-Number | No regulated |
| Proper shipping name | Not available |
| Hazard Class | Not available |
| Packing Group | Not available |
| Environmental hazard | No |

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| 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. |
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Section 15. Regulatory information

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| U.S. Federal regulations | United States inventory (TSCA 8b): Not determined. |
| Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) | No listed |
| Clean Air Act Section 602 Class I Substances | No listed |
| Clean Air Act Section 602 Class II Substances | No listed |

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| DEA List I Chemicals (Precursor Chemicals) | No listed |
| SARA 302/304 <u>Composition/information on ingredients</u> | No products were found |
| SARA 304 RQ | Not applicable |
| SARA 311/312 Classification | Fire hazard Immediate (acute) health hazard |
| SARA 313 | No products were found |

Composition/information on ingredients

| Name | % | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|-------------------|--------|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| Isopropyl alcohol | 15-30% | Yes | No | No | Yes | No |
| Bromothymol blue | 0.5-5% | No | No | No | No | No |

State regulations

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|--------------------|--|
| California Pro. 65 | No products were found. |
| New York | None of the components are listed |
| Massachusetts | The following components are listed: Isopropyl Alcohol |

International regulations

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| China | Not determined. |
| Japan | Not determined. |
| Europe | Not determined. |
| Taiwan | Not determined. |

Section 16. Other information

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| Date of issue mm/dd/yyyy | 05/30/2018 |
| Date of previous issue | Not available |
| Version | 1 |
| Prepared by | NitaBiome, Inc |