

BioDestroy

| | | | 1. IDE | ENTIFICATION | | |
|--|------------|---|---|---|------|---|
| Product name | : | BioDestroy | | | | |
| Product code | : | 09-10215 | | Other means of identification | : | Not available. |
| Supplier | : | Sani-Marc Inc. 42 rue de l'Artisan Victoriaville, Qc G6P 7E3 1-819-758-1541 | | Manufacturer | : | Sani-Marc Inc. 42 rue de l'Artisan Victoriaville, Qc G6P 7E3 1-819-758-1541 |
| Identified uses | : | Industrial applicatior Approved for use in F 02456141 | ns: Biofilmicide Food & Beverage plants. DIN | Uses advised against | : | This product is formulated to be diluted. Do not use undiluted. Read product label before using. |
| Date of issue (YYYY-MA | ۸-DE | D) : 2021-01-0 | 6 | | | |
| in c | ase | e of emergency | : Emergency phone | : CANUTEC (613) 996-66 | 666 | (Collect calls accepted) |
| | | | | | | |
| | | | 2. HAZARD | S IDENTIFICATION | | |
| Information in t | his : | section only concern | | ntact your account manager to entification. | o ge | t more information on diluted form hazards |
| Product Classification | : | OXIDIZING LIQUIDS SKIN CORROSION - SERIOUS EYE DAMA Health Hazards Not | Category 1A | ory 1 | | |
| Signal word | : | Danger | н | azard pictograms : | N. | |
| Hazard statements | : | May intensify fire; o Causes digestive tra Causes severe skin b | | | | |
| Precautionary stateme | <u>nts</u> | | | | | |
| General | : | Corrosive material. | Handle with care. Read label | before use. Keep out of reach | of c | children. |
| Prevention | : | combustible materia | ials. Wash hands thoroughly af | | -ver | to smoking. Keep away from clothing and other ntilated area. Specific protective equipment is |
| Response | : | ON SKIN (or hair): 1 Rinse with water. | Take off immediately all contai | minated clothing. Rinse skin wi | th w | OWED: Rinse mouth. Do NOT induce vomiting. IF vater. Wash contaminated clothing before reuse. tinue rinsing. In any case of exposure, get medical |
| Storage | : | Store in an appropri | iate location. | | | |
| Disposal | : | Dispose of contents | and container in accordance v | vith all local, regional, national | and | international regulations. |
| Supplemental label ele | mei | nts : | Percentage of the mixture co | nsisting of ingredient(s) of unkn nsisting of ingredient(s) of unkn nsisting of ingredient(s) of unkn | own | n dermal toxicity: 50.4% |
| Other hazards which de classification | o no | ot result in : | None known. | | | |



3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture : Mixture

| Name | CAS number | <u>% (w/w)</u> |
|-------------------------------|------------|----------------|
| hydrogen peroxide | 7722-84-1 | 10 - 30 |
| dodecylbenzenesulphonic acid | 27176-87-0 | 10 - 30 |
| acetic acid | 64-19-7 | 5 - 10 |
| peracetic acid | 79-21-0 | 5 - 10 |
| Alcohols, C12-15, ethoxylated | 68131-39-5 | 1 - 5 |
| , , , | | |

Occupational exposure limits, if available, are listed in Section 8.

| | 4. FIRST AID MEASURES |
|----------------------|--|
| Description of requ | ired first aid measures |
| Eye contact | In case of contact with eyes, flush with fresh water. Check for and remove any contact lenses. Continue rinsing. If irritation persists, get medical attention. Chemical burns must be treated promptly by a physician. Get medical attention if blistering occurs or redness persists. Get medical advice/attention. |
| Skin contact | Rinse with water. Wash contaminated skin with soap and water. Remove contaminated clothing and wash it before reuse. Chemical burns must be treated promptly by a physician. Get medical attention if blistering occurs or redness persists. |
| Ingestion | Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Chemical burns must be treated promptly by a physician. Get medical attention if symptoms occur. |
| Inhalation | Move victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Get medical attention if adverse health effects persist or are severe. Maintain an open airway. |
| Most important syn | nptoms/effects, acute and delayed |
| Eye contact | Adverse symptoms may include the following: pain watering redness |
| Skin contact | Adverse symptoms may include the following: pain or irritation redness blistering may occur |
| Ingestion | Adverse symptoms may include the following: stomach pains |
| Inhalation | Adverse symptoms may include the following: respiratory tract irritation coughing |
| Notes to physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| See toxicological ir | nformation (Section 11) |

| | 5. FIRE-FIGHTING MEASURES | |
|--|--|--|
| Extinguishing media | | |
| Suitable extinguishing media | an extinguishing agent suitable for the surrounding fire. | |
| Unsuitable extinguishing media | e known. | |
| Specific hazards arising from the chemical | Oxidizing material. May intensify fire. In a fire or if heated burst. | , a pressure increase will occur and the container may |
| Hazardous thermal decomposition | ucts Decomposition products may include the following materials carbon dioxide carbon monoxide sulfur oxides | 5: |
| Special fire-fighting procedures | nptly isolate the scene by removing all persons from the vicinity of tities are involved in a major fire, evacuate the area. No action sh ble training. Move containers from fire area if this can be done wi ainers cool. Fight fire from protected location or maximum possible | nould be taken involving any personal risk or without thout risk. Use water spray to keep fire-exposed |
| Special protective equipment for fighters | Fire-fighters should wear appropriate protective equipmer full face-piece operated in positive pressure mode. | nt and self-contained breathing apparatus (SCBA) with a |



6. ACCIDENTAL RELEASE MEASURES

Personal precautionsNo 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. Initiate spill response procedures if required.Personal protectionPut on appropriate personal protective equipment (see Section 8).Cleaning methodContain 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). Use a water rinse for final clean-up.

7. HANDLING AND STORAGE

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 Section 8 for additional information on hygiene measures.

Storage and
IncompatibilityDo not store above the following temperature: 30°C (86°F). Store in accordance with local regulations. Separate from alkalis. Separate from
reducing agents and combustible 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. Keep out of reach of children. Store away from incompatible materials (see Section 10).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Ingredient name | Exposure limits |
|----------------------------------|---|
| hydrogen peroxide | CA Ontario Provincial (Canada, 1/2013). TWA: 1.4 mg/m ³ 8 hours. CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 1 ppm 8 hours. CA British Columbia Provincial (Canada, 6/2017). TWA: 1 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 1 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 1 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 2 ppm 15 minutes. TWA: 1 ppm 8 hours. CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 10 ppm 8 hours. CA Shrso EL: 10 ppm 8 hours. |
| | 15 min OEL: 37 mg/m ³ 15 minutes. 15 min OEL: 15 ppm 15 minutes. CA British Columbia Provincial (Canada, 6/2017). TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 ppm 8 hours. TWAEV: 25 mg/m ³ 8 hours. STEV: 15 ppm 15 minutes. STEV: 15 ppm 15 minutes. STEV: 37 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). |
| peracetic acid | STEL: 15 ppm 15 minutes. TWA: 10 ppm 8 hours. ACGIH TLV (United States, 4/2014). STEL: 0.4 ppm 15 minutes. Form: Inhalable fraction and Vapor ACGIH TLV (United States, 3/2017). STEL: 0.4 ppm 15 minutes. Form: Inhalable fraction and vapor |
| Appropriate engineering controls | If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineerin controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |
| Individual protection measures | |
| Eye/face protection | Continued or severe exposures might required to wear a face shield or chemical splash goggles. It is minimally suggested to wear safety glasses while using or handling this product. |
| Hands and Body protection | It is suggested to wear chemical-reisitant gloves while using or handling this product. It is suggested to wear safety apron while using or handling this product. |



Handling

Respiratory protection

| Physical state | Liquid. [Clear] | рН | <1 | Flash point | Closed cup: 83°C (181.4°F) |
|-----------------------------------|---------------------------|------------------|---------------------------------------|---|---|
| | | | | | [Not specified] [Product doe not sustain combustion.] |
| Color | Colorless. | Relative density | 1.1 | Melting point | -25.9°C (-14.6°F) |
| Odor | Pungent. Vinegar-like | Viscosity | Not available. | Boiling point | 99°C (210.2°F) |
| Odor threshold | Not available. | Vapor pressure | 2.9 kPa (22 mm Hg) [room temperature] | Fire point : | Not available. |
| Solubility in water : | Not available. | Vapor density | : Not available. | Evaporation rate : | >1 (butyl acetate = 1) |
| Decomposition tempera | ature : Not available | 2. | Auto-ignition temperature | : 270°C (518°F) | |
| Partition coefficient: n water | -octanol/ : Not available | 2. | Flammability (solid, gas) | : Highly flammat presence of the materials or co flames, sparks discharge, heat combustible ma | e following nditions: open and static : and |

10. STABILITY AND REACTIVITY

| Reactivity | No specific test data related to reactivity available for this product or its ingredients. |
|-----------------------------|--|
| Chemical stability | The product is stable. |
| Incompatible materials | Reactive or incompatible with the following materials: combustible materials reducing materials Reactive or incompatible with alkali. |
| Conditions to avoid | No specific data. |
| Possibility of hazardous re | Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: contact with combustible materials Reactions may include the following: risk of causing or intensifying fire May cause an exothermic reaction in presence of alkali. |
| Hazardous decomposition | products Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

11. TOXICOLOGICAL INFORMATION

| Eye contact | May cause eye bi | | | | | |
|-----------------------|--|---|---------|--|---|--|
| | ,, | JLU | | Adverse symptoms pain watering redness | may include the following: | |
| Skin contact | May cause skin b | urns | | Adverse symptoms pain or irritation redness blistering may occu | may include the following: ur | |
| Ingestion | | digestive tract. Ca to mouth, throat a | | Adverse symptoms stomach pains | may include the following: | |
| Inhalation | Inhalation of vap respiratory tract | oors or mist may ca irritation. | iuse | Adverse symptoms respiratory tract ir coughing | may include the following: rritation | |
| Toxicity data | | | | | | |
| Product/ingredient na | me | Result | Species | Dose | Exposure | |



| | I | 1 | I | | |
|--|-----------------------------|------------------|-------------------------|--------------|--|
| hydrogen peroxide | LC50 Inhalation | Rat | 2000 mg/m ³ | 4 hours | |
| | Vapor LD50 Dermal | Rabbit | 4060 mg/le= | | |
| | LD50 Dermal LD50 Oral | | 4060 mg/kg | - | |
| De de sulhers se de la herrie e sid (C | | Rat | 2000 mg/kg | - | |
| Dodecylbenzenesulphonic acid (C acetic acid | LC50 Ural | Rat | 890 mg/kg | - | |
| acetic acid | | Mouse | 5620 ppm | 1 hours | |
| | Gas. LC50 Inhalation | Rat | 11000 mg/m3 | 4 hours | |
| | Vapor | Rat | 11000 mg/m ³ | 4 hours | |
| | LD50 Dermal | Rabbit | 1.06 a //ra | | |
| | LD50 Oral | Rat | 1.06 g/kg 3310 mg/kg | - | |
| peracetic acid | LC50 Inhalation | Rat | 66 ppm | - 4 hours | |
| שבי מכבנול מכוע | Gas. | Nac | oo hhiii | | |
| | LC50 Inhalation | Rat | 0.45 mg/l | 4 hours | |
| | Vapor | nac | 0.45 mg/ (| + Hours | |
| | LD50 Dermal | Rabbit | 1410 mg/kg | _ | |
| | LD50 Oral | Rat | 1540 mg/kg | - | |
| Alcohols, C12-15, ethoxylated | LD50 Oral | Rat | 2 g/kg | - | |
| BioDestroy | LD50 Oral | Rat | 1922 mg/kg | - | |
| Information on toxicological effe | ante . | | | | |
| | ects | | | | |
| Mutagenicity | No known significant effect | ts or critical | hazards. | | |
| | | | | | |
| Teratogenicity | No known significant effec | ts or critical | hazards. | | |
| Developmental effects | No known significant effec | ts or critical | hazards. | | |
| - | - | | | | |
| Fertility effects | No known significant effec | ts or critical | hazards. | | |
| Sensitization | Not available. | | | | |
| Carcinogenicity | No known significant effect | ts or critical h | nazards. | | |
| | | | | | |

12. ECOLOGICAL INFORMATION

| Product/ingredient name | Result | Species |
|-------------------------------|------------------------------------|--|
| hydrogen peroxide | Acute EC50 1.2 mg/l Marine water | Algae - Dunaliella tertiolecta - Exponential growth phase |
| | Acute EC50 5.38 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata |
| | Acute EC50 2320 µg/l Fresh water | Daphnia - Daphnia magna - Neonate |
| | Acute LC50 93 ppm Fresh water | Fish - Oncorhynchus mykiss |
| | Chronic NOEC 989.7 ppm Fresh water | Fish - Oncorhynchus tshawytscha - Egg |
| acetic acid | Acute EC50 73400 µg/l Fresh water | Algae - Navicula seminulum |
| | Acute EC50 73900 µg/l Fresh water | Algae - Navicula seminulum |
| | Acute EC50 65000 µg/l Fresh water | Daphnia - Daphnia magna - Neonate |
| | Acute LC50 32 mg/l Marine water | Crustaceans - Artemia salina |
| | Acute LC50 85.8 ul/L Marine water | Crustaceans - Artemia sp. |
| | Acute LC50 75000 µg/l Fresh water | Fish - Lepomis macrochirus |
| | Acute LC50 88000 µg/l Fresh water | Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) |
| peracetic acid | Chronic NOEC 0.2 ppm Fresh water | Fish - Cyprinus carpio - Young |
| Alcohols, C12-15, ethoxylated | Acute EC50 0.7 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata |
| | Acute EC50 0.39 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate |
| | Acute EC50 302 µg/l Fresh water | Daphnia - Daphnia magna - |

Acute LC50 1400 µg/l Fresh water Chronic NOEC 1 mg/l Fresh water

Chronic NOEC 83 $\mu g/l$ Fresh water

: Unknown Bioaccumulative potential : Unknown Mobility in soil

Acute EC50 0.18 mg/l

Acute EC50 0.73 mg/l

Acute LC50 1.1 mg/l

Acute LC50 1.6 mg/l

BioDestroy

Persistence and

degradability

Ecotoxicity data

Neonate

subcapitata

Neonate

Daphnia

Fish

Fish - Pimephales promelas

Algae - Pseudokirchneriella

Daphnia - Daphnia magna -

Algae - Selenastrum

Fish - Lepidochromis

Exposure

72 hours

96 hours 48 hours

96 hours 43 days

96 hours

96 hours

48 hours

48 hours 48 hours

96 hours

96 hours

30 days

96 hours

48 hours

48 hours

96 hours

96 hours

21 days

120 hours

48 hours

96 hours

96 hours

: Unknown Other adverse effects : Unknown

13. DISPOSAL CONSIDERATIONS Disposal methods Dispose content and container in accordance with local, regional and national regulation in force. **14. TRANSPORT INFORMATION UN number** UN proper shipping name Transport hazard class Packing group **TDG Placard** (es) UN3149 UN3149 HYDROGEN PEROXYDE Ш **TDG Classification** 5.1 (8) AND PEROXYACETIC ACID STABILISED MIXTURE Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8), 2.23-2.25 (Class 5). Explosive Limit and Limited Quantity Index 0.5

Remarks Limited quantity index 0.5 L

See shipping documents for specific information on DOT, IMDG or IATA Additional information

| | 15. REGULATORY INFORMATION |
|-------------------------------------|---|
| <u>Canadian lists</u> | |
| Canadian NPRI | The following components are listed: Peracetic acid (and its salts) |
| CEPA Toxic substances | None of the components are listed. |
| Canada inventory | All components are listed or exempted. |
| International lists | |
| United States All components are li | sted or exempted. |
| | |
| | 16. OTHER INFORMATION |

| Hazardous Material Information System (U.S.A.) | Health Hazard Fire Hazard | 3 | |
|--|------------------------------|-----|--|
| | Reactivity | | |
| | Personal Protection | H H | |
| Date of issue/Date of revision (YYYY-MM- : 202 DD) | 1-01-06 | | |
| | 1-01-06 | | |
| DD) Prepared by : Regulatory Affairs Department Sani-Marc Inc. | 1-01-06 | | |
| DD) Prepared by : Regulatory Affairs Department Sani-Marc Inc. 42 rue de l'Artisan | 1-01-06 | | |
| DD) Prepared by : Regulatory Affairs Department Sani-Marc Inc. | 1-01-06 | | |

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

