MICROBAN*

SAFETY DATA SHEET

1. Identification

Product identifier Protection That Lives On Microban Professional Brand 24 Hour Keeps Killing 99% of

Bacteria For Up To 24 Hours Sanitizing Spray

Other means of identification

Product code 30130-002

Recommended use Sanitizing Spray

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name Microban Products Company

Address 11400 Vanstory Drive

Huntersville, NC 28078

USA

Telephone 704-875-0806

Email infoleads@microban.com

Emergency phone number (24 hr Emergency) 1-800-535-5053 or 1-352-323-3500

2. Hazard(s) identification

Physical hazards Gases under pressure Liquefied gas

Health hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, acute Category 1

hazard

Hazardous to the aquatic environment, Category 1

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Contains gas under pressure; may explode if heated. Very toxic to aquatic life with long lasting

effects.

Precautionary statement

Prevention Avoid release to the environment. Observe good industrial hygiene practices.

Response Collect spillage. Wash hands after handling

Storage Protect from sunlight. Store in a well-ventilated place.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Nitrogen		7727-37-9	<1
Quaternary Ammonium Compounds, Benzyl-c12-16-alkyldimethyl, Chlorides		68424-85-1	<0.2

Chemical name	Common name and synonyms	CAS number	%
DIDECYL DIMETHYL AMMON CHLORIDE	IUM	7173-51-5	<0.1
Ethanol		64-17-5	<0.1

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

IngestionRinse mouth. Get medical attention if symptoms occur.Most importantDirect contact with eyes may cause temporary irritation.

symptoms/effects, acute and delayed

Indication of immediate

medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Special protective equipment

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not handle or store near an open flame, heat or other sources of ignition. Store in tightly closed container. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Components	Туре	Value	
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3	
		1000 ppm	
US. ACGIH Threshold Limit Valu	ies		
Components	Туре	Value	
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
US. NIOSH: Pocket Guide to Ch	emical Hazards		
Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3	
		mag 0001	

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid, Gas.

Form Liquid. Liquefied gas.

Color Clear water-white to Slightly off-white.

Not available. Odor Not available. Odor threshold 9.5 - 10.5 Ηq Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Not available. Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure
Not available.
Vapor density
Not available.
Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Specific gravity 0.99 - 1.01

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Excessive heat. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact

No adverse effects due to skin contact are expected.

Eye contact

Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Components Species Test Results

DIDECYL DIMETHYL AMMONIUM CHLORIDE (CAS 7173-51-5)

Acute Dermal

LD50 Rabbit 2730 mg/kg

Ethanol (CAS 64-17-5)

<u>Acute</u>

Inhalation

LC50 Mouse 39 mg/l, 4 Hours

Species Test Results Components

Oral

LD50 Rat 6.2 g/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

This product is not expected to cause skin sensitization. Skin sensitization

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

Not classified.

repeated exposure **Aspiration hazard**

Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components **Species Test Results**

DIDECYL DIMETHYL AMMONIUM CHLORIDE (CAS 7173-51-5)

Aquatic

Fish LC50 0.001 - 0.01 mg/l, 96 hours White sturgeon (Acipenser

transmontanus)

Ethanol (CAS 64-17-5)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 7.7 - 11.2 mg/l, 48 hours LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours Fish

Quaternary Ammonium Compounds, Benzyl-c12-16-alkyldimethyl, Chlorides (CAS 68424-85-1)

Aquatic

Acute

Crustacea EC50 Daphnia magna < 1 mg/l, 48 hours

No data is available on the degradability of any ingredients in the mixture. Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethanol -0.31Nitrogen 0.67

Mobility in soil No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN1950 **UN** number

UN proper shipping name Transport hazard class(es) Aerosols, non-flammable, (each not exceeding 1 L capacity)

2.2 Class Subsidiary risk Label(s) 2.2

Packing group

Not available.

Environmental hazards

Marine pollutant No

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging exceptions None Packaging non bulk Packaging bulk None

Transport in bulk according to Annex II of MARPOL 73/78 and Not established.

the IBC Code

DOT



General information Avoid transport on vehicles where the load space is not separated from the driver's compartment.

Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable

regulations.

15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US** federal regulations

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethanol (CAS 64-17-5) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard

Gas under pressure

categories

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethanol (CAS 64-17-5) Low priority

FIFRA Information This chemical is a pesticide product registered by the Environmental Protection Agency and is

subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for

workplace labels of non-pesticide chemicals.

US state regulations

California Proposition 65

WARNING: California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material

is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

For more information go to www.P65Warnings.ca.gov.

16. Other information, including date of preparation or last revision

Issue date 13-November-2017

Revision date 05-September-2018

Version # 04

HMIS® ratings Health: 0

Flammability: 0 Physical hazard: 3

NFPA ratings Health: 0

Flammability: 0 Instability: 3

NFPA ratings

0 3

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 a 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.

Revision information Physical and chemical properties: Flammability (solid, gas)

Toxicological Information: Toxicological Data

Transport Information: Agency Name, Packaging Type, and Transport Mode Selection

Regulatory Information: United States

Regulatory information: California Proposition 65

GHS: Classification