MICROBAN S

SAFETY DATA SHEET

1. Identification

Product identifier Protection That Lives On Microban Professional Brand 24 Hour Keeps Killing 99.9% of

Bacteria For Up To 24 Hours Bathroom Cleaner

Other means of identification

Product code 30120-008

Recommended use Bathroom Cleaner
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 Not classified.

Health hazards Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

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 Causes skin irritation. Causes serious eye irritation. Very toxic to aquatic life with long lasting

effects.

Precautionary statement

Prevention Wash thoroughly after handling. Avoid release to the environment. Wear eye protection/face

protection. Wear protective gloves.

Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off

contaminated clothing and wash before reuse. Collect spillage.

Storage Store away from incompatible materials.

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	%
CITRIC ACID		77-92-9	<3
ALCOHOLS, C12-15, ETHOXYLATED		68131-39-5	<1
Quaternary Ammonium Compounds, Benzyl-c12-16-alkyldimethyl, Chlorides		68424-85-1	<1
DIDECYL DIMETHYL AMMONIUM CHLORIDE		7173-51-5	<0.5
DIOCTYIDIMETHYLAMMONIUM CHLORIDE		5538-94-3	<0.5
Ethanol		64-17-5	<0.5

4. First-aid measures

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

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

symptoms/effects, acute and vision. Skin irritation. May cause redness and pain.

symptoms/effects, acute and vision. Skin irritation, iway cause redness and pain delayed

Indication of immediate Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

treatment needed

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 Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire.

media

Specific hazards arising from During fire, gases hazardous to health may be formed.

the chemical

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

and precautions for firefighters

Fire fighting Move containers from fire area if you can do so without risk. **equipment/instructions**

Specific methodsUse standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. 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

Should not be released into the environment. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

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. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in tightly closed container. 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	ues		
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	
		1000 ppm	

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. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Face shield is recommended. Wear safety glasses with side shields (or goggles). Eye/face protection

Skin protection

Wear appropriate chemical resistant gloves. Hand protection

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

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

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

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

Liquid. Physical state **Form** Liquid.

Color Clear water-white to Slightly Off-white.

Not available. Odor **Odor threshold** Not available. 1.8 - 2.2Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

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
Vapor density
Relative density
Not available.
Not available.
Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.
(n-octanol/water)

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available.

Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Specific gravity 1.01 - 1.02

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

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoidContact 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 Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

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

Components Species Test Results

CITRIC ACID (CAS 77-92-9)

Acute Oral

LD50 Rat 6730 mg/kg

Components Species Test Results

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

<u>Acute</u>

Dermal

LD50 Rabbit 2730 mg/kg

Ethanol (CAS 64-17-5)

<u>Acute</u>

Inhalation

LC50 Mouse 39 mg/l, 4 Hours

Oral

LD50 Rat 6.2 g/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

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

Germ cell mutagenicityNo 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

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

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
ALCOHOLS, C12-15, ETHOXYLATED (CAS 68131-39-5)

Aquatic

Crustacea EC50 Water flea (Ceriodaphnia dubia) 0.37 - 0.43 mg/l, 48 hours
Fish LC50 Channel catfish (Ictalurus punctatus) 1.04 - 1.39 mg/l, 96 hours

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

Aquatic

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

transmontanus)

Ethanol (CAS 64-17-5)

Aquatic

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

Components Species Test Results

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

Aquatic

Acute

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

Persistence and degradability

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethanol -0.31

Mobility in soil No data available.

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

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

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the

material under controlled conditions in an approved incinerator. 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

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Annex II of MARPOL 73/78 and the IBC Code

General information

Not established.

Per IATA DGR Special Provision A197, IMDG Code 2.10.2.7, and 49 CFR § 171.4(c), this product, as packaged, is not regulated as a Marine Pollutant due to package size. Regulated as UN3082, Environmentally Hazardous Substance, Liquid, N.O.S., Class 9, Packing Group III if single or inner

package size exceeds 5 liters and/or outer packaging exceeds 30kg.

15. Regulatory information

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

Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

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

chemical

Classified hazard Skin corrosion or irritation

categories Serious eye damage or eye irritation

Yes

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

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** 07-March-2019

Version # 05

HMIS® ratings Health: 2

Flammability: 0 Physical hazard: 0

NFPA ratings Health: 2

Flammability: 0 Instability: 0

NFPA ratings



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 Composition / Information on Ingredients: Disclosure Overrides

Transport information: General information