



CREATING A SHIELD OF BIOSECURITY.™

TECHNICAL DATA SHEET

Xtreme Bio® - Antimicrobial Multi-Surface Cleaner (Concentrate)

Xtreme Bio® is a highly concentrated broad spectrum antimicrobial that has been tested and proven to kill bacteria and fungus. It has also been proven to inactivate viruses including coronaviruses. When used as directed, Xtreme Bio is effective on all surfaces, including vehicle interiors and porous materials. Xtreme Bio inactivates and eliminates viruses and known pathogens like PEDv, PRRSv, ASFv, PCV-2, SE, and AI. Unlike traditional disinfecting technologies – which are extremely corrosive to transportation equipment and facility assets – Xtreme Bio will not corrode vehicles or material used in CAFOs and other commercial/industrial facilities. Xtreme Bio is made with FDA recognized GRAS (Generally Recognized as Safe) ingredients. Xtreme Bio is non-toxic and non-mutagenic. Xtreme Bio contains no alcohols, iodine, chlorine bleach, ammonia, hydrogen peroxide, methanol, quaternary amines or glutaraldehyde. It is non-carcinogenic, non-pathogenic and does not contain any substances considered dangerous to use. Xtreme Bio is a natural choice of top veterinarians who manage both small and large animal populations. Xtreme Bio is backed by years of studies from top veterinary universities in the US. Xtreme Bio is also supported through independent research lab testing and live field studies.

FEATURES AND BENEFITS:

- This product is exempt from EPA registration under the minimal risks pesticides exemption FIFRA section 25(b)
- Xtreme Bio is formulated with all natural ingredients and considered GRAS
- University and independent lab studies demonstrate that Xtreme Bio inactivates specific viruses like: PEDv, PRRSv, ASFv, PCV-2, SE, and AI
- Xtreme Bio effectively replaces quats, peroxides, lime and chlorine
- Reduces exposure in vehicles, trailers and critical biosecurity control points
- Complete degradation resulting in the elimination of odors
- Effectively kills odor causing bacteria on food contact surfaces & non-food contact surfaces
- Kills bacteria that cause spoilage, deterioration, or fouling materials on a variety of surfaces
- Kills odor causing bacteria
- Effectively controls the growth of algae
- Neutralizes and removes odors
- Kills and controls micro-organisms infectious to animals
- Neutralizes viruses and bacteria
- Excellent foaming properties for washout facilities and non-fuming
- Has been shown to treat in the presence of minimal amounts of organic matter
- Has been shown to remain active at temperatures below freezing in studies
- Proudly made in the USA!

TYPICAL PHYSICAL PROPERTIES

Appearance and Color	Clear to colorless liquid
Initial Freeze Point.....	32°F (0°C)
Odor	Mild detergent odor
Solubility in Water	100%
Melting Point	N/A
Flashpoint.....	N/A
Specific Gravity.....	1.00± .04

DIRECTIONS FOR USE

POROUS AND NON POROUS SURFACES:

A solution of 2 ounces of Xtreme Bio per gallon of water may be used as a disinfectant/detergent when cleaning surfaces. To treat clean surfaces, use 1/2 ounce of Xtreme Bio per gallon of water. Apply with mop, brush, spraying or foaming equipment. Allow to air dry on surface.

LIVESTOCK FACILITIES & EQUIPMENT:

Remove manure, soil, dirt, bedding, feed and watering equipment. Thoroughly scrape surfaces, equipment and tools to reduce organic material to minimal amounts. Pressure wash all surfaces clean. A solution of 2 ounces of Xtreme Bio per gallon of water may be used as a disinfectant/detergent when cleaning surfaces. To treat clean surfaces, use a solution of 1/2 ounce of Xtreme Bio per gallon of water on a clean surface. Apply with mop, brush, spraying or foaming equipment. Allow to air dry on surface.

For use in temperatures below freezing propylene glycol may be added.

STORAGE AND HANDLING:

Rinse empty container with water and discard as per federal, state and local guidelines. Suggested shelf life of Xtreme Bio is 2 years. Xtreme Bio test strips can be requested from your supplier to verify product activity.

PACKAGING:

Xtreme Bio is packaged in 4x1 gallon cases, 5 gallon pails, 55 gallon drums and 275 gallon totes.



Midwest Ag
SOLUTIONS
515-493-1156
Xtreme-Bio.com

Recommendations given in this data sheet are based on tests believed to be reliable. However, the use of the information is beyond the control of Midwest Ag, LLC and no guarantee, expressed or implied is made to the results obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage from the misuse of the product as such, or in combination with other materials. This bulletin is not to be taken as a license to operate under or recommendation to infringe any patent.

SAFETY DATA SHEET

SECTION I. IDENTIFICATION

Product identifiers
Product name : Xtreme Bio
Antimicrobial Multi-Surface Cleaner

Brand : Midwest AG Solutions LLC

Relevant identified uses of the substance or mixture and uses advised against
Identified uses : EPA Exempt 25(b) Antimicrobial Product

Details of the supplier of the safety data sheet
Company : Midwest AG Solutions LLC
1621 N 1st St
Winterset IA 50273
USA

For product information only
Telephone : + 1.844.445.8967

Emergency telephone number
Emergency Phone # : **Chemtrec**
+ 1.800.424.9300 (Within USA)

SECTION II. HAZARD IDENTIFICATION

Hazard Classification: Not Applicable

GHS Classification of the substance or mixture

Acute Toxicity-Oral: Category 5
Skin Corrosion/Irritation: Category 3
Serious Eye Damage/Eye Irritation: Category 2B

GHS Label Elements

Signal Word: Warning
Hazard Symbols: Not Applicable

Precautionary Statements: May be harmful if swallowed
Causes mild skin irritation
Causes eye irritation

Hazards not otherwise classified (HNOC) or not covered by GHS - Not Applicable

Other Information: May cause mild skin irritation if not rinsed off with soap and water
May cause eye irritation if not rinsed out with copious amounts of water

SECTION III. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCES

CAS#	CHEMICAL NAME	COMMON NAME/SYNONYMS	IMPURITIES/ADDITIVES
77-92-9	Citric Acid	Citric Acid	N/A
8007-02-1	Lemongrass Oil	Lemongrass Oil	N/A
1393-03-09	Quillaja Saponin	Soap Bark	N/A
N/A	40CFR 180.940 - Commonly Consumed Food Commodities "Trade Secret Claimed"		

NOTE:

The identity and composition of this material is trade secret (29CFR 1910.1200(i)) and is available to any attending physician, paramedical personnel and/or spill response personnel in the case of an emergency

There are no additional ingredients present which, within the current knowledge of the manufacturer and in the concentrations applicable, classified as hazardous to the health or environment thus do not require reporting in this section.

SECTION IV. FIRST AID MEASURES

Description of first aid measures

General advice

It is always recommended to consult a physician. Show this safety data sheet to the doctor in attendance.

If Inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Remove any contaminated clothing first. Wash off with soap and plenty of water. If irritation occurs consult a physician.

In case of eye contact

If wearing contacts, first remove. Flush eyes with water as a precaution. If irritation occurs consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. If irritation occurs consult a physician.

Most important symptoms and effects, both acute and delayed

See sections 2(II) and 11(XI) for the most important symptoms and effects

Indication of any immediate medical attention and special treatment needed

No data available

SECTION V. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Product does not support combustion, use extinguishing agent for type of surrounding fire.

Specific Hazards arising from the substance or mixture

No known specific hazards

Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary

Further information

No data available

SECTION VI. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing any vapors or mist. Ensure adequate ventilation.

Move personnel to safe areas.

For personal protection see section 8

Methods and materials for containment

Soak up with inert absorbent material and dispose of in accordance with local and state disposal regulations.

Keep in suitable closed containers for proper disposal.

Reference to other sections

For disposal see section 13

Cleanup Procedures

Product is water based, contain spills using absorbent material suitable for water based products.

SECTION VII. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Do not eat or drink while using this product. Avoid mixing with incompatible materials. Prevent accidental release into the environment. Do not let product enter storm drains.

For precautions see section 2

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place. Open containers must be carefully closed/resealed and kept upright to prevent leakage. Do not mix with strong acids, bases, or oxidizing agents.

SECTION VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering equipment

Normal Ventilation is generally adequate. Handle in accordance with good industrial hygiene and safety practices. Personal protective equipment may be worn for added safety in accordance with the below recommended equipment. Wash hands before all breaks and at the end of the workday.

Personal protective equipment

Eye/face protection

While eye protection is not required, where protection from nuisance levels are desired, use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

While skin protection is not required, where protection from nuisance levels are desired, Gloves must be inspected prior to use. Use proper glove removal technique. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Splash contact

Material: Nitrile rubber

If mixed with other substances, and under conditions which differ from product directions, contact your glove supplier. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

While body protection is not required, where protection from nuisance levels are desired, choose body protection in relation to its type, to the concentration and to the specific work-place.

Respiratory protection

While Respiratory protection is not required, where protection from nuisance levels are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter storm drains.

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance	Form: Clear Colorless
b) Odor	Mild Lemongrass
c) Odor Threshold	No data available
d) pH	No data available
e) Freeze/melting point	≤ 32 F (0 C)
f) Boiling point	≥ 211 F (99 C)
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper flammability limits	No data available
k) Lower flammability limits	No data available
l) Vapor pressure	No data available
m) Vapor density	No data available
n) Specific gravity	1.00 ± 0.02
o) Solubility	100% Soluble(water)
p) Partition coefficient	No data available
q) Auto-ignition temperature	No data available
r) Decomposition temperature	No data available
s) Kinematic viscosity	No data available
t) Relative Density	No data available

Other safety information

No data available

These physical properties are typical values for this product and not specifications. No other data available.

SECTION X. STABILITY AND REACTIVITY

Reactivity

This material is considered to be non-reactive under normal conditions of use.

Chemical stability

Stable under recommended storage conditions

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Strong Acids, Bases, and Oxidizing Agents

Hazardous decomposition products

Other decomposition products -no data available

In the event of fire, see section 5

SECTION XI. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50: Oral-rat - 3,120 mg/kg

Respiration: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation:

no data available

Serious eye damage/eye irritation:

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Route(s) of entry/exposure

Skin, eye, ingestion

(Inhalation is not a significant route of exposure when used as directed)

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Additional Information
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated by any agency, governmental or otherwise.

SECTION XII. ECOLOGICAL INFORMATION

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential
Does not bioaccumulate

Mobility in soil
no data available

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects
no data available

SECTION XIII. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

Note: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

SECTION XIV. TRANSPORT INFORMATION

TRANSPORT INFORMATION

DOT (US)	TDG(Canada)
Not dangerous goods	Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

Note: The proper shipping name and/or hazard class for this product may vary according to packaging, properties, and mode of transportation. Customer is urged to consult 49 CFR 100-177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods.

SECTION XV. REGULATORY INFORMATION

US FEDERAL
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
TSCA Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Components

None of the chemicals in this product have a TPQ. No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

This chemical is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm..

European/International Regulations

European Labeling in Accordance with EC Directives

European Economic Community

Classification per Directive 67/548/EEC or 1999/45/EC

Not Classified

Risk Phrases: None allocated

Safety Phrases: S2-Keep out of reach of children

S24/25 Avoid contact with skin and eyes

WGK, Germany (Water danger/protection): No data available
Canada - DSL/NDL

This product is listed on Canada's DSL List.

Canada - WHMIS

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations. Canadian Ingredient Disclosure List: N/A

SECTION XVI. OTHER INFORMATION

OTHER INFORMATION

HMIS Rating

Health hazard: 0

Flammability: 0

Physical Hazard: 0

NFPA Rating

Health hazard: 0

Fire Hazard: 0

Reactivity Hazard: 0

Further information

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End of Safety Data Sheet

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