

Defender full spectrum Germicidal wipes

Safety Data Sheet

SECTION 1: Product and company identification

Product name : Defender full spectrum Germicidal wipes
Use of the substance/mixture : Premoistened wipe
Product code : 1616 SDS Number:
Company : Artemis Bio-Solutions, Inc
14505 Torey Chase Blvd Suite 205
Houston, TX 77014 - USA
T (630) 359-4090
Emergency number : (630) 359-4090

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Eye Irrit. 2 H319

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : Causes serious eye irritation
Precautionary statements (GHS-US) : Wash thoroughly after handling
Wear eye protection, protective clothing, protective gloves
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 advice/attention

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

Full text of H-phrases: see section 16

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	(CAS-No.) 112-34-5	7-13	Eye Irrit. 2A, H319
tetrasodium ethylenediaminetetracetate	(CAS-No.) 64-02-8	1-5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact : Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water.
First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Consult a doctor/medical service if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Suspected of causing cancer. Causes serious eye irritation.

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Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Contact during a long period may cause slight irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed. Gastrointestinal complaints.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media allowed.

5.2. Special hazards arising from the substance or mixture

Reactivity : Upon combustion: CO and CO₂ are formed.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Gloves. Protective clothing.

Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container closed when not in use. Store locked up.

Incompatible products : Strong acids. Oxidizing agents.

Storage area : Keep only in the original container. Store in a dry area. Store in a cool area.

Special rules on packaging : meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether (112-34-5)

ACGIH	ACGIH TWA (ppm)	10 ppm
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tetrasodium ethylenediaminetetracetate (64-02-8)

Not applicable

8.2. Exposure controls

Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Safety glasses. Gloves. Protective clothing.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: White wipe impregnated with a colorless liquid.
Odor	: Mild odor
Odor threshold	: No data available
pH	: 11.5 - 12.5 - Tested using the liquid component of the towelette.
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °F Closed Cup. - Tested using the liquid component of the towelette.
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.01 g/ml - Tested using the liquid component of the towelette.
Solubility	: Liquid component is soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
VOC content	: < 0.5 % - Tested using the liquid component of the towelette.

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO₂ are formed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

tetrasodium ethylenediaminetetracetate (64-02-8)	
LD50 oral rat	> 2000 mg/kg (Rat)
ATE CLP (oral)	500.000 mg/kg body weight

Skin corrosion/irritation : Not classified
pH: 11.5 - 12.5 - Tested using the liquid component of the towelette.

Serious eye damage/irritation : Causes serious eye irritation.
pH: 11.5 - 12.5 - Tested using the liquid component of the towelette.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : None under normal use.

Symptoms/effects after skin contact : Contact during a long period may cause slight irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed. Gastrointestinal complaints.

SECTION 12: Ecological information

12.1. Toxicity

tetrasodium ethylenediaminetetracetate (64-02-8)	
LC50 fish 1	121 mg/l (LC50; 96 h)
EC50 Daphnia 1	625 mg/l (EC50; 24 h)
Threshold limit algae 1	> 100 mg/l (EC0; 72 h)

12.2. Persistence and degradability

tetrasodium ethylenediaminetetracetate (64-02-8)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	< 0.002 g O ₂ /g substance
Chemical oxygen demand (COD)	0.54 - 0.58 g O ₂ /g substance

12.3. Bioaccumulative potential

tetrasodium ethylenediaminetetracetate (64-02-8)	
Log Pow	-2.6
Bioaccumulative potential	Bioaccumulation: not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not flush wipes.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT : Not regulated for transport

Additional information

Other information : No supplementary information available.

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ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling 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. Following is the hazard information as required on the pesticide label:

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

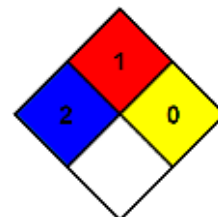
Full text of H-phrases:

H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

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