



IDENTIFICATION

IDENTIFICATION				
Product Identifier: Product Name: Product Code: Synonyms:	Stop the Bites™ None N/A: Product is a proprietary water-based mixture			
Manufacturer Information:	Arkion Life Sciences LLC 551 Mews Drive Suite J New Castle, DE 19720 Toll Free: 800-468-6324 Phone: 302-504-7400 Fax: 302-655-3603 Email: info@ArkionLS.com Website: www.arkionls.com			
Emergency Phone Number:	INFOTRAC: 800-535-5053 National Poison Control: 800-222-1222			
Recommended Use: Use Restrictions:	This product is a water-based outdoor adult mosquito and tick insecticide/repellent spray concentrate. Do not apply to bodies of water.			
2 HAZARDS IDENTIFIC	ATION			
Hazard Classification: Hazard Statements: Precautionary Statements:	 Skin corrosion/irritation: Category 2 Serious eye damage/eye irritation: Category 1 Skin sensitization: Category 1 Signal Word: DANGER Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. Prevention: Thoroughly was face, hands and any exposed skin after handling. Avoid breathing mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective eye/face protection and gloves. Response: See Section 4 for supplemental First Aid instructions. If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. If on Skin: Wash with plenty of water and soap. Get medical advice/attention if skin irritation or rash occurs. Take off contaminated clothing and wash before reuse. Storage: Store locked up. Disposal: Dispose of contents/container to an approved waste disposal plant. Other Information: Harmful to aquatic life with long-lasting effects. 			

Unknown Acute Toxicity:

35.5% of this mixture consists of ingredient(s) of unknown toxicity.
23% of this mixture consists of ingredient(s) of unknown acute oral toxicity.
35.5% of this mixture consists of ingredient(s) of unknown acute dermal and acute inhalation (gas/vapor/dust/mist) toxicity.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight	Hazardous Material Information Review Act ("HMIRA") Registry Number	Date HMIRA Filed and Date Exemption Granted (if applicable)
Cedarwood oil	8000-27-9	Trade Secret	-	-
Geraniol	106-24-1	Trade Secret	-	-
Lemongrass oil	8007-02-1	Trade Secret	-	-
Oleic acid	112-80-1	Trade Secret	-	_
Sodium lauryl sulfate	151-21-3	Trade Secret	-	-



According to OSHA HCS (29 CFR § 1910.1200(g)) as Published in the Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012

4 FIRST AID MEASURES

General Advice:	Immediate medical attention is required. Show this Safety Data Sheet to the doctor in attendance.
Inhalation:	Remove to fresh air. Get immediate medical attention if symptoms occur.
Eye Contact:	Immediately rinse eyes with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical
	attention/advice.
Skin Contact:	Immediately wash off skin with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. See a
	physician in the case of skin irritation or allergic reaction.
Ingestion:	Clean mouth with water and drink plenty of water afterwards. Never give anything by mouth to an unconscious person. Do not
	induce vomiting. Call a physician.

Self-protection of the First Aider: Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see Section 8).

Most Important Symptoms and Effects, both Acute and Delayed: Burning sensation, itching, rashes and hives.

Indication of any Immediate Medical Attention and Special Treatment Needed: May cause sensitization in susceptible persons. Treat symptomatically.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Large Fire: CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable Extinguishing Media: Do not scatter spilled material with high pressure water streams.

Specific Hazards Arising from the Chemical: Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products: Carbon oxides.

Explosion Data:

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

Special Protective Equipment for Fire-Fighters: Fire-fighters should wear self-contained breathing apparatus and full fire-fighting turnout gear. Use personal protection equipment.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Other Information:	Refer to protective measures listed in Sections 7 and 8.
Containment Methods:	Prevent further leakage or spillage if safe to do so.
Cleanup Methods:	Dam up. Soak up with inert absorbent material then pick up and transfer to properly labeled containers.
	TORAGE

HANDLING AND STORAGE

Advice on Safe Handling:	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.
	Do not eat, drink or smoke when using this product. Ensure adequate ventilation. In case of insufficient
	ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.
Storage Conditions:	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of
	children.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by
	the region specific regulatory bodies.
Engineering Controls:	Showers, eyewash stations and ventilation systems.
Eye/Face Protection:	Tight sealing safety goggles.
Hand Protection:	Wear suitable, impervious gloves.
Skin/Body Protection:	Wear suitable, long-sleeved protective clothing.
Respiratory Protection:	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is
	experienced, ventilation and evacuation may be required.
General Hygiene:	Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. Wear suitable eye/face
	protection. Handle in accordance with good industrial hygiene and safety practices.



According to OSHA HCS (29 CFR § 1910.1200(g)) as Published in the Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012

PHYSICAL AND CHEMICAL PROPERTIES

Auto-ignition temperature:	N/A	
Color:	Yellowish/cream	
Decomposition temperature:	N/D	
Evaporation rate:	N/D	
Flammability (solid, gas):	N/D	
Flash point:	N/A	
Freezing point:	N/D	
Initial boiling point and range:	N/D	1
Melting point:	N/A	\
Odor:	Lemony	

Partition coefficient: n-octanol/water:	N/A
pH:	6.0
Physical state:	Liquid suspension
Relative density:	0.9901 g/mL
Solubility(ies):	Miscible in water
Upper/lower explosive limits:	N/D
Upper/lower flammability limits:	N/D
Vapor pressure:	N/A
Viscosity:	20 cPs
N/A = Not Applicable	N/D = Not Determined

10 STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: None under normal processing.

Hazardous Polymerization: Does not occur.

Conditions to Avoid: None known based in information supplied. Incompatible Materials: Strong acids, bases and oxidizing agents.

Hazardous Decomposition Products: Carbon oxides.

11 TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:

Inhalation: Specific test data for the mixture is not available. May cause irritation of respiratory tract.

Eye Contact: Specific test data for the mixture is not available. Severely irritating to eyes. Causes serious eye damage. May cause burns. May cause irreversible damage to eyes based on components.

Skin Contact: Specific test data for the mixture is not available. May cause sensitization by skin contact based on components. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Causes skin irritation.

Ingestion: Specific test data for the mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Toxicological Effects:

Symptoms: Redness, burning, itching, rashes and hives. May cause blindness. May cause redness and tearing of the eyes.

Acute Toxicity:

The following values are calculated based on Chapter 3.1 of the GHS document:

ATEmix (oral): 20,078.00 mg/kg ATEmix (dermal): 72,050.00 mg/kg

Unknown Acute Toxicity:

35.5% of this mixture consists of ingredient(s) of unknown toxicity.23% of this mixture consists of ingredient(s) of unknown acute oral toxicity.35.5% of this mixture consists of ingredient(s) of unknown acute dermal and acute inhalation (gas/vapor/dust/mist) toxicity.

Component Information:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Cedarwood oil	> 5 g/kg (rat)	> 5 g/kg (rabbit)	-
Geraniol	= 3600 mg/kg (rat)	> 5 g/kg (rabbit)	-
Lemongrass oil	> 5 g/kg (rat)	> 5 g/kg (rabbit)	-
Oleic acid	= 25 g/kg (rat)	-	-
Sodium lauryl sulfate	= 1288 mg/kg (rat)	= 200 mg/kg (rabbit)	> 3900 mg/m ³ (rat) 1 h



According to OSHA HCS (29 CFR § 1910.1200(g)) as Published in the Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012

Delayed and Immediate Effects as well as Chronic Effects from Short- and Long-Term Exposure:

Skin corrosion/irritation: Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation: Classification based on data available for ingredients: Causes burns. Risk of serious damage to eyes.

Respiratory or Skin Sensitization: May cause sensitization by skin contact.

Germ Cell Mutagenicity: No information available.

Carcinogenicity: No information available.

Reproductive Toxicity: No information available.

STOT-Single Exposure: No information available.

STOT-Repeated Exposure: No information available.

Aspiration Hazard: No information available.

12 ECOLOGICAL INFORMATION (NON-MANDATORY)

Ecotoxicity: Harmful to aquatic life with long-lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	<i>Daphnia magna</i> (Water Flea)
Oleic acid	-	96h LC ₅₀ = 205 mg/L	-	-
		(Pimephales promelas)		
Sodium lauryl sulfate	96h EC ₅₀ : 30-100 mg/L	96h LC ₅₀ : 4.2-4.8 mg/L	$EC_{50} = 0.46 \text{ mg/L} 30 \text{ min}$	48h EC ₅₀ = 1.8 mg/L
	(Desmodesmus subspicatus)	(Lepomis macrochirus)	EC ₅₀ = 0.72 mg/L 15 min	
	96h EC ₅₀ = 117 mg/L	96h LC ₅₀ = 4.5 mg/L	$EC_{50} = 1.19 \text{ mg/L 5 min}$	
	(Pseudokirchneriella	(Lepomis macrochirus)		
	subcapitata)	96h LC ₅₀ : 4.06-5.75 mg/L		
	96h EC50: 3.59-15.6 mg/L	(Lepomis macrochirus)		
	(Pseudokirchneriella	96h LC ₅₀ : 6.2-9.6 mg/L		
	subcapitata)	(Pimephales promelas)		
	72h EC ₅₀ = 53 mg/L	96h LC ₅₀ = 1.31 mg/L		
	(Desmodesmus subspicatus)	(Cyprinus carpio)		
		96h LC ₅₀ : 9.9-20.1 mg/L		
		(Brachydanio rerio)		
		96h LC50: 4.3-8.5 mg/L		
		(Oncorhynchus mykiss)		
		96h LC ₅₀ = 4.62 mg/L		
		(Oncorhynchus mykiss)		
		96h LC50: 22.1-22.8 mg/L		
		(Pimephales promelas)		
		96h LC ₅₀ = 4.2 mg/L		
		(Oncorhynchus mykiss)		
		96h LC ₅₀ : 10.8-16.6 mg/L		
		(Poecilia reticulata)		
		96h LC ₅₀ : 13.5-18.3 mg/L		
		(Poecilia reticulata)		
		96h LC50: 10.2-22.5 mg/L		
		(Pimephales promelas)		
		96h LC ₅₀ = 7.97 mg/L		
		(Brachydanio rerio)		
		96h LC ₅₀ : 15-18.9 mg/L		
1		(Pimephales promelas)		
		96h LC ₅₀ : 5.8-7.5 mg/L		
		(Pimephales promelas)		
		96h LC ₅₀ : 8-12.5 mg/L		
<u> </u>		(Pimephales promelas)		

Persistence and Degradability: No information available. Bioaccumulation: Sodium lauryl sulfate: 1.6 Log Pow Mobility: No information available. Other Adverse Effects: No information available.



According to OSHA HCS (29 CFR § 1910.1200(g)) as Published in the Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012

13 DISPOSAL CONSIDERATIONS (NON-MANDATORY)

Water Treatment Methods:

Waste from Residues/Unused Products: Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated Packaging: Do not reuse empty containers.

14 TRANSPORT INFORMATION (NON-MANDATORY)

DOT, TDG, MEX, ICAO, IATA, IMDG/IMO, RID, ADR and ADN: Not Regulated

15 REGULATORY INFORMATION (NON-MANDATORY)

ODS (Ozone-Depleting Substances): Not applicable.

POP (Persistent Organic Pollutants): Not applicable.

ENR (Export Notification Requirements): Not applicable.

AICS (Australian Inventory of Chemical Substances): Contact supplier for inventory compliance status.

DSL/NDSL (Canadian Domestic Substances List/Non-Domestic Substances List): Contact supplier for inventory compliance status. EINECS/ELINCS (European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances): Contact supplier for inventory compliance status.

ENCS (Japan Existing and New Chemical Substances): Contact supplier for inventory compliance status.

KECL (Korean Existing and Evaluated Chemical Substances): Contact supplier for inventory compliance status.

PICCS (Philippines Inventory of Chemicals and Chemical Substances): Contact supplier for inventory compliance status.

TSCA (U.S. Toxic Substances Control Act Section 8(b) Inventory): Contact supplier for inventory compliance status.

U.S. Federal Regulations:

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 ("SARA"). This product does not contain any chemicals that are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories: Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act): This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 122.42).

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act ("CERCLA") (40 CFR 302) or the Superfund Amendments and Reauthorization Act ("SARA") (40 CFR 355). There may be specific reporting requirements at the local, regional or state levels pertaining to releases of this material.

U.S. State Regulations:

California Proposition 65: This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations: This product may contain substances regulated by state right-to-know regulations:

Chemical Name/CAS Number	Illinois	Massachusetts	New Jersey	Pennsylvania	Rhode Island
Oleic acid/112-80-1				Х	

16 OTHER INFO	RMATION			
NFPA	Health Hazards: 3	Flammability: 0	Instability: 0	Physical and Chemical Properties -
HMIS	Health Hazards: 3	Flammability: 0	Physical Hazards: 0	Personal Protection: X
SDS Information: Number:	STB			

	010
Date Prepared:	May 29, 2018
Version:	1

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 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 specific in the test.