

EpiShield™**Safety Data Sheet****1. Identification**

Product Identifier NI02ES-1
Product Synonyms None
Recommended uses and restrictions Minimum risk insecticide and miticide for horticulture

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2. Hazards Identification

Hazard Classification Not classified; all hazards are not otherwise classified (HNOC)
OSHA Defined Hazards Not Classified
Hazards Not Otherwise Classified Direct contact with eye may cause irritation. Prolonged inhalation of spray mist or droplets may cause respiratory irritation. May cause skin irritation upon direct contact.

Label Elements

Signal Word CAUTION

Precautionary Statement

Prevention Wear eye/face protection and use in well ventilated areas. Avoid breathing spray mist or droplets and wash thoroughly after use.

Response If in eye: Rinse carefully with plenty of water.
If inhaled: Move to a well-ventilated area to allow fresh air breathing.

If on skin: Rinse thoroughly with plenty of water.

Storage Keep in original closed container at RT (20C°).

Disposal Follow your local waste disposal agency instructions for any leftover product and the container.

3. Composition/information on ingredients

Mixture

Ingredient	CAS Number	Percentage
Peppermint oil	8006-90-4	15
Clove oil	800-34-8	10
Sodium lauryl sulfate	151-21-3	3
Inert 1	Trade Secret	0-30*
Inert 2	Trade Secret	0-30*
Inert 3	Trade Secret	0-30*
Inert 4	Trade Secret	0-30*
Inert 5	Trade Secret	0-30*

Composition Comments

US GHS: * Designates that a specific chemical identity and/or exact percentage of the composition has been withheld as a trade secret according to paragraph (i) of § 1910-1200.

4. First-Aid Measures

INGESTION

Do not induce vomiting. Drink plenty of water and get medical attention.

INHALATION

Move the affected person immediately to a well-ventilated area with fresh air and get medical attention.

SKIN CONTACT

Wash the area thoroughly with soap and water.

EYE CONTACT

Immediately wash with plenty of water for 15 minutes. In all cases, contact a doctor or poison control office if irritation or symptoms persist. Ensure that medical personnel are aware of materials involved and take precautions accordingly.

5. Fire-fighting measures

Suitable extinguishing media Special Protective Equipment and Precautions for Firefighters General Information

Use extinguishing media appropriate for fire and surroundings such as carbon dioxide, water or foam. Full protective clothing and breathing apparatus should be worn in case of fire. In case of fire, avoid contact with product mist and thermal decomposition products.

6. Accidental release measures

Personal Precautions	Keep unnecessary personnel away from upwind of spill or leak. Eliminate all ignition sources and ventilate accidental release area.
Protective Equipment	Wear appropriate protective equipment such as safety glasses, face shield, rubber gloves, long-sleeved shirt, long pants, socks and safety boots. A self-contained breathing apparatus may be used in case of inadequate ventilation.
Emergency Procedures	First responders and cleanup team should wear protective equipment, secure the accidental release areas and call local authorities if significant spillage can not be contained.
Containment Procedures	Keep combustible materials away from spill. Immediately contain spills with absorbents to prevent entry into drainage or bodies of water.
Cleanup Procedures	Large spills: Stop the flow of material if it can be done without risks. Use absorbents to soak up the spilled material and transfer to suitable containers for disposal. Clean the area with water and absorbents. Dispose used absorbents according to local regulations. Small spills: Soak up the spill with appropriate absorbents and dispose according to local regulations. Clean the area with water and cleaning towels.

7. Handling and storage

Precautions for Safe Handling	Observe good industrial hygiene and safety procedures. Keep the containers closed when not in use. After exposure, wash hands with soap and plenty of water.
Storage Recommendations	Keep in original closed container at RT (20C°). Avoid direct sun light or heating. Keep away from children.

8. Exposure controls/personal protection

Occupational Exposure Limits	There are no available PEL, TLV or other recommended exposure limits for this mixture.
Biological Limit Values	No biological exposure limits noted.
Appropriate Engineering Controls	Use local exhaust ventilations when using this product in enclosed spaces.
Personal Protection	
Eye:	Wear safety glasses/goggles with side shields.
Skin:	Wear appropriate protective clothing and chemical resistant gloves.

Inhalation: Respiratory protection is not normally needed except when engineering controls may not provide adequate ventilation. Use an appropriate respirator when needed.

9. Physical and chemical properties

Appearance:	Liquid
Physical state:	Liquid
Color:	Pale yellow
Odor:	Slightly minty and clove
Melting/freezing point:	N/D
Auto-ignition temperature:	N/A
Decomposition temperature:	N/D
Evaporation rate:	N/D
Flammability (solid, gas):	N/A
Flash point:	N/A
Initial boiling point and range:	N/D
Partition coefficient (n-octanol/water):	N/D
pH:	N/D
Relative density:	N/D
Solubility(ies):	Water
Upper/lower explosive limits:	N/A
Upper/lower flammability limits:	N/A
Vapor pressure:	N/D
Viscosity:	N/D

N/A = Not Applicable
N/D = Not Determined

10. Stability and reactivity

Reactivity	No dangerous reaction under normal conditions of use, storage and transport.
Chemical Stability	Mixture is stable under normal conditions.
Possibility of Hazardous Reactions	Hazardous polymerization does not occur.
Hazardous Decomposition Products	No known hazardous decomposition products.
Conditions to avoid	Avoid exposure to extreme high or low temperatures.

11. Toxicological information

Information on Likely Routes of Exposure

Inhalation: Not available

Eye contact:	Not available
Skin contact:	Not available
Ingestion:	Not available
Symptoms Related to the Physical, Chemical and Toxicological Characteristics	Direct contact with eyes may cause mild temporary irritation
Acute Toxicity	Not available
Carcinogenicity:	Not available
US. National Toxicology Program (NTP) Report of Carcinogenesis	Not listed
IARC Monographs Evaluation of Carcinogenicity	Not listed
OSHA Specifically Regulated Substances	Not regulated
Reproductive Toxicity	Not available
Specific Target Organ Toxicity – Single Exposure	Not classified
Specific Target Organ Toxicity – Repeated Exposure	Not classified
Aspiration Hazard	Not available

12. Ecological information (non-mandatory)

Ecotoxicity	No ecotoxicity data available for this mixture.
Persistence Degradability	Not available
Bioaccumulative Potential	Not available
Mobility in Soil	Not available
Other Adverse Effects	Not available

13. Disposal considerations (non-mandatory)

Do not contaminate water or food. Do not refill or reuse containers. Recycle the containers if appropriate. Dispose or incinerate according to your procedures. Follow your local waste disposal agency instructions for any leftover product in the container. Also refer to section 8 for appropriate personal protective equipment.

14. Transport information (non-mandatory)

This mixture is not regulated for transport.

US DOT name:	Not regulated
IATA name:	Not regulated
IMDG name:	Not regulated
TSC name:	Not regulated

15. Regulatory information (non-mandatory)

BioWorks Inc. represents that this product qualifies for exemption from the United States Environmental Protection Agency (EPA) under FIFRA Section 25(b).
Not registered or intended for sale in Canada.

16. Other information

The information in this SDS has been obtained from current sources and is correct to the best of our knowledge, information and belief at the date of its publication. The information has been designed only as a guidance for use, safe handling, storage, transport, disposal and release and is not to be considered a warranty or quality specification. Despite that all efforts have been deployed to ensure full disclosure but in some cases no data are available which is declared.