

	SAFETY DATA SHEET (SDS) HAKU	
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SECTION 1. PRODUCT AND MANUFACTURER IDENTIFICATION

1.1 Product Identification

Trade Name: HAKU
Name of the Active Ingredient: Oregano oil + Peppermint oil + Cinnamon oil + Clove oil + Soybean oil + Neem oil + Fish oil

1.2 Identified uses of the substance or mixture

Use: Acaricide

1.3 Distributor information

Company: AGRICULTURA NACIONAL, S.A. DE C.V
Av. Periférico Sur 3325, Piso 3, Col San Jerónimo Lídice,
10210 La Magdalena Contreras, CDMX
Phone no.: (55) 5089-1500 or 01-800-0211-568

Telephone number in case of emergency: 800-00-214-00
(55) 55-59-15-88

Poison Care Center (ATOX): 800 000 ATOX (2869).

SECTION 2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture: Not considered a hazardous product.

Classification according to NOM-018-STPS-2015.

Acute toxicity by ingestion H303	Category 5 May be harmful if swallowed
Acute dermal toxicity H313	Category 5 May be harmful in contact with skin

2.2 GHS label elements, including precautionary phrases:

Labeling in accordance with NOM-018-STPS-2015.

Hazard-determining components for labeling:

Symbol (s)
No pictogram

Warning word: CAUTION

Hazard statements

HAKU

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H303 May be harmful if swallowed.
H313 May be harmful in contact with skin

Cautionary advice.

P101 If medical advice is needed: have the container and label of the product on hand.

P102 Keep out of reach of children
P103 Read label before use
P210 Keep away from heat, sparks, open flames, hot surfaces and other sources of ignition.

P233 Keep container tightly closed.
P234 Keep only in original container.
P262 Avoid contact with the eyes, skin or clothing.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a ventilated area.
P280 Wear protective equipment for face, eyes and skin.

P301+P330 In case of ingestion, rinse mouth thoroughly.
P302+P352 In case of skin contact, wash with plenty of water.
P304+P340 In case of inhalation, move the victim outdoors and keep him/her in a position that makes breathing easier.

P305+P351 In case of contact with the eyes, flush thoroughly with water for several minutes.

P306+P360 In case of contact with clothing, immediately rinse contaminated clothing and skin with plenty of water before removing clothing.
P370+P376 In case of fire, stop the leak if it can be done safely.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P410 Protect from sunlight.
P411 Store at a temperature not exceeding 25°C. Disposal:
P501 Dispose of contents and container in accordance with local regulations.

2.3 Other hazards that do not contribute to the classification.

No hazards identified

SECTION 3. COMPOSITION/INFORMATION ON COMPONENTS

3.1 Mixtures

Type of formulation

Emulsifiable liquid

Active ingredient

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Oregano oil (*Lippia graveolens*), Peppermint oil (*Mentha piperita*), Cinnamon oil (*Cinnamomum zeylanicum*), Clove oil (*Syzygium aromaticum*), Soybean oil (*Glicine max*), Neem oil (*Azadirachta indica*), Fish oil (Makereel).

Components of the formulation

NAME	CAS No.	CONCENTRATION
Oil of oregano (<i>Lippia graveolens</i>)	84012-24-8	0.50% equivalent to 4.474 g/L
Peppermint oil (<i>Mentha piperita</i>)	8006-90-4	1% equivalent to 8.948 g/L
Cinnamon oil (<i>Cinnamomum zeylanicum</i>)	8015-91-6	1.50% equivalent to 13.422 g/L
Clove oil (<i>Syzygium aromaticum</i>)	8000-34-8	1.00% equivalent to 8.948 g/L
Soybean oil (<i>Glicine max</i>)	8001-22-7	4.50% equivalent to 40.266 g/L
Neem Oil (<i>Azadirachta indica</i>)	8007-80-5	6.50% equivalent to 58.162 g/L
Fish oil (<i>Makereel</i>)	8001-25-0	15.00 equivalent to 134.22 g/L

Other information.

No information available.

N/A: Not Applicable

N/D: Not Available

SECTION 4. FIRST AID

4.1 Description of first aid

General recommendation

Remove the victim from the source of exposure by placing him/her in a well ventilated area and keeping him/her warm. Seek immediate medical attention. Keep patient warm and at rest.

Inhalation

Remove the victim to a ventilated place.

Contact with the skin

Wash with plenty of water

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Contact with the eyes

Wash with plenty of water

Ingestion

Induce vomiting immediately and get the victim to drink plenty of water. Provide medical assistance for any complications that may arise.

4.2 Main symptoms and acute and chronic effects

Signs and Symptoms

Eyes: May cause irritation.

Skin: May cause irritation.

Inhalation: May cause respiratory tract irritation.

Ingestion: May cause intestinal spasms, diarrhea, nausea, vomiting and abdominal pain.

Aggravated by overexposure: May cause hypersensitivity.

4.3 Instructions for any medical care and special treatment to be administered immediately.

Antidote and treatment

Symptomatic treatment. Consult a physician in all cases.

In case of ingestion give the Safety Data Sheet and the product label to the physician.

SECCIÓN 5. FIRE SAFETY MEASURES

5.1 Extinguishing agents.

Suitable

Use any convenient means to extinguish the fire such as CO₂, water, chemical powder, foam and others.

5.2 Specific hazards arising from the substance or mixture

Fire protection measures: Not considered flammable.

Fire hazard, flammability of the product: Not flammable.

Flash point: N/A.

Flammable limits: Not considered flammable.

Products of combustion: N/A.

Fire hazard present with other substances: No ignition hazard when in contact with any known substance but should not be mixed with any flammable substance.

Explosion hazard: Not considered a flammable product.

Explosion hazard due to static discharge: No risk of explosion due to static discharge.

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Risk of fire due to mechanical impact: No risk of explosion due to mechanical impact. On ignition it produces fumes that are slightly toxic to the environment.

5.3 Recommendations for firefighting personnel

Special protective equipment for firefighting personnel

Use firefighting equipment

Additional information

Evacuate personnel and move away from the path of the fire.

N/A: Not Applicable

N/D: Not Available

SECTION 6. CONTROL MEASURES IN CASE OF ACCIDENTAL SPILLS OR LEAKS

6.1 Personal precautions, protective equipment and emergency procedures

Safe handling precautions

Wear safety glasses. Wear appropriate personal protective equipment (full coverall). Use plastic gloves. Wear safety shoes. Wear a face shield or safety mask.

6.2 Environmental precautions

Does not produce any effect on the environment. When ignited it produces fumes that are slightly toxic to the environment

6.3 Containment and cleaning methods and materials

Cleaning methods

Use absorbent material, wash with water and detergent and disinfect the area.

SECTION 7. HANDLING AND STORAGE

7.1 Safe handling precautions

Safe handling recommendations

Store the product in a cool, sheltered and ventilated place, keep out of reach of children and do not allow it to come into contact with animals or food.

7.2 Conditions for safe storage, including possible incompatibilities

Technical requirements for storerooms and containers

Store the product in cool, covered and ventilated places, do not leave within reach of children and do not allow it to come into contact with animals or food.

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Information for joint storage

HAKU is not compatible with chemical or botanical fungicides, sulfur, copper and other fungistatic agents. It is compatible with biostimulants, foliar fertilizers and synthetic coadjuvants. Nevertheless, it is advisable to run tests before performing the final mix.

SECTION 8. EXPOSURE CONTROLS/INDIVIDUAL PROTECTION

8.1 Control parameters

N/D

8.2 Exposure controls

Personal Protection

In normal usage and handling conditions refer to the instructions on the label and/or package label. In all other cases the following recommendations should be applied.

Respiratory protection

Use a face mask or safety mask.

Protection for the hands

Use plastic gloves.

Eye protection

Wear safety glasses.

Skin and body protection

Wear appropriate personal protective equipment (full coverall).
Wear safety shoes.

General protective and hygienic measures

Clean and maintain personal protective equipment according to the manufacturer's instructions. Store and wash personal protective equipment separately from other clothing.

N/A: Not Applicable

N/D: Not Available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Essential physical and chemical properties

Shape	Emulsifiable liquid
Color	Orange to red
Odor	Irritant
pH	4.8-6.5
Flammability	N/A
Vapour pressure	N/D
Relative density	0.940-0.975 g/ml
Solubility in water	Yes

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Flash point N/D
Viscosity N/D

9.2 Other information
N/D

N/A: Not Applicable

N/D: Not Available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal environmental conditions and is not considered reactive.
10.2 Chemical stability	Becomes unstable at temperatures higher than 45°C.
10.3 Possibility of harmful reactions	Compatible with most agrochemicals; however, testing is suggested before final mixing. Polymerization hazard: Does not polymerize.
10.4 Conditions to avoid	Do not store at temperatures higher than 45°C.
10.5 Incompatible materials	Not compatible with chemical and botanical fungicides, sulfur, copper and other fungistatics. It is compatible with biostimulants, foliar fertilizers and synthetic coadjuvants. However, it is suggested to make tests before making the final mixture.
10.6 Hazardous decomposition products	The product tends to decompose if it is not stored properly or at temperatures higher than 45°C (113°F).

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	N/A
Acute inhalation toxicity	N/D
Acute dermal toxicity	N/D
Skin irritation (rabbit)	N/D
Eye irritation (rabbit)	N/D
Sensitization (guinea pig)	N/D

Chronic Toxicity/Effects

Symptoms	See section 4.2.
Mutagenicity	No mutagenic effects
Neurological effects	N/A
Reproductive Toxicity	Not known to cause reproductive system problems.

N/A: Not Applicable

N/D: Not Available

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SECCIÓN 12. INFORMACIÓN ECOTOXICOLÓGICA

12.1 Toxicity

Toxicity to fish	N/D
Toxicity to invertebrates	N/D
Toxicity to aquatic plants	N/D

12.2 Persistence and degradability

Biodegradability	N/A
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12.3 Bio-accumulation potential

Bioaccumulation	N/D
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12.4 Mobility in soil

Mobility in soil	N/D
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12.5 Other adverse effects

Additional ecological information	No effect on the environment
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N/A: Not Applicable
N/D: Not Available

SECTION 13. DISPOSAL INFORMATION

13.1 Disposal of the substance (waste):

During product handling, avoid washing or pouring product residues or empty containers into soil, rivers, lagoons, streams, dams, canals or water reservoirs to prevent contamination. Handle empty containers and product residues in accordance with the provisions of the General Law for the Prevention and Integral Management of Waste, its Regulations or the Empty Container Management Plan, registered with SEMARNAT. In case of spills, wear personal protective equipment and recover the spilled product with some absorbent material (e.g., earth or clay), collect the waste in an airtight container and take it to the nearest authorized hazardous waste collection center. Triple wash the empty container and pour the rinsing water into the tank or container where the application mixture is prepared.

SECTION 14. TRANSPORTATION INFORMATION

In accordance with NOM-002-SCT/2011

14.1 UN Number	Not regulated as a hazardous product
14.2 Official Transport Designation of the United Nations	N/A
14.3 Transport hazard class(es)	Ground Transportation DOT: This product is not classified as hazardous for transport. Maritime Transportation IMDG: This product is not classified as dangerous for transport. Air Transportation ICAO/IATA: This product is not classified as hazardous for transport.

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14.4 Packaging group

N/D

14.5 Environmental hazard label

Not considered a hazardous substance.

14.6 Hazard identification number.

N/A

N/A: Not Applicable

N/D: Not Available

SECTION 15. REGULATORY INFORMATION (MEXICO)

NOM-232-SSA1-2009. Pesticides: Establishing the requirements for packaging, packing and labeling of technical grade products for agricultural, forestry, livestock, gardening, urban, industrial and domestic use.

NOM-002-SCT/2011: List of most commonly transported hazardous substances and materials.

NOM-018-STPS-2015, Harmonized system for the identification and communication of hazards and risks from hazardous chemicals in the workplace.

SECTION 16. OTHER INFORMATION

Text of the hazard statements mentioned in Section 2

- The information is believed to be correct, but it is not comprehensive and is to be used only as a reference, which is based on the current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.
- Considering that the use of this information and the products is beyond the manufacturer's control, the company assumes no liability in this regard. Determining the conditions of safe use of the product is the obligation of the user.

N/A: Not Applicable

N/D: Not Available

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