

	<b>SAFETY DATA SHEET (SDS)</b> <b>BIOTANIC</b>	
		<b>Edition 1-00</b>
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## SECTION 1. PRODUCT AND MANUFACTURER IDENTIFICATION

### 1.1 Product Identification

**Trade Name:** **BIOTANIC**  
**Name of the Active Ingredient:** Nordihydroguaiaretic acid

### 1.2 Identified uses of the substance or mixture

**Use:** Fungicide for agricultural use

### 1.3 Distributor information.

**Company:** AGRICULTURA NACIONAL, S.A. DE C.V.  
Address: Av. Periférico Sur No. 3325 Piso 3, Col. San Jerónimo Lídice, Del. Magdalena Contreras C.P. 10200, Ciudad de México.  
Phone no. (55) 5089-1500 or 800-0211-568.

**1.4 Telephone number in case of transportation emergency:** 800 00 214 00  
**(ANIQ-SETIQ) 24 hrs** (55) 5559 1588  
**oison Care Center (ATOX):** 800 000 2869

## SECTION 2. HAZARD IDENTIFICATION

### 2.1 Classification of the substance or mixture:

**Classification according to NOM-018-STPS-2015.**

Acute oral toxicity **Category 5**  
H303 May be harmful if ingested.

### 2.2 GHS label elements, including precautionary phrases:

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

**Hazard-determining components for labeling:**

**Symbol(s)**



**BIOTANIC**

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**Signal word: Warning**

**Hazard statements**

H303 May be harmful if ingested.

**Cautionary advice.**

P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye/face protection.  
P362 + P364 Remove contaminated clothing and wash before reuse.

P270 Do not eat, drink or smoke while handling this product.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container to an approved waste disposal plant.

**Intervention/ Response Advisory Tips**

P301 + P312 In case of ingestion, immediately contact the poison control center or a physician.  
P330 Rinse mouth.  
P302 + P352 In case of contact with the skin, rinse with plenty of water.  
P332 + P313 In case of skin irritation, consult a doctor.  
P305 + P351+338 In case of contact with the eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and if possible. Continue rinsing.

**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 concentrate

**Active ingredient:** nordihydroguaiaretic acid

**Composition of the formulation**

NAME	CAS No.	CONCENTRATION
Nordihydroguaiaretic acid	500-38-9	0.56 %; equivalent to 5.32 g/L

**Other information.**

No information available.

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#### **SECTION 4. FIRST AID**

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##### **4.1 Description of first aid**

<b>Inhalation</b>	Make sure that the affected individual is breathing without difficulty and expose him/her to fresh air.
<b>Contact with the skin</b>	Immediately remove all contaminated clothing. Wash affected area with plenty of soap and water.
<b>Contact with the eyes</b>	Wash for at least 15 minutes with clean water.
<b>Ingestion</b>	Have the victim drink at least two glasses of water immediately after ingestion of the product and seek medical advice.

##### **4.2 Main symptoms and acute and chronic effects**

<b>Signs and Symptoms</b>	There is no evidence of the presentation of toxic symptoms or typical symptoms associated with exposure.
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##### **4.3 Instructions for any medical care and special treatment to be administered immediately.**

<b>Antidote and treatment</b>	There is no information regarding any specific antidote.
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#### **SECCIÓN 5. FIRE SAFETY MEASURES**

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##### **5.1 Extinguishing agents.**

<b>Suitable</b>	Alcohol-resistant foam, dry chemical or carbon dioxide (CO2) to extinguish flames.
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##### **5.2 Specific hazards arising from the mixture**

In case of fire, a potential release of hazardous combustion gases or fumes.

##### **5.3 Recommendations for firefighting personnel**

<b>Special protective equipment for firefighting personnel</b>	In case of fire, use a self-contained breathing apparatus.
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**Additional information**

No information available

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

### **6.1 Personal precautions, protective equipment and emergency procedures.**

**Safe handling precautions**

Avoid contact with spilled products or contaminated surfaces. Do not eat, drink or smoke during spill clean-up. Keep away from heat and ignition sources.

### **6.2 Environmental precautions**

**No additional measures necessary.**

### **6.3 Containment and cleaning methods and materials**

**Cleaning methods**

Collect with an inert absorbent product (e.g. sand, diatomite, acid fixative, universal fixative, sawdust). Store in appropriate sealed containers for disposal. Dispose of product or waste in accordance with local regulations.

## **SECTION 7. HANDLING AND STORAGE**

### **7.1 Safe handling precautions**

**Safe handling recommendations**

Avoid contact with the eyes and skin. Avoid breathing fumes or mists. Ensure adequate ventilation.

### **7.2 Conditions for safe storage, including possible incompatibilities**

**Technical requirements for storerooms and containers**

Keep container closed, in a dry, cool and well-ventilated place. Open and handle container with care.

**Information for joint storage**

Store the product in a cool, dry and well-ventilated place. Do not contaminate water sources, other pesticides, fertilizers or food during storage. Keep out of reach of children.

## **SECTION 8. EXPOSURE CONTROLS/INDIVIDUAL PROTECTION**

### **8.1 Control parameters**

<b>COMPONENTS</b>	<b>CAS No.</b>	<b>CONTROL PARAMETERS</b>	<b>CURRENT</b>	<b>BASELINE</b>
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<b>Nordihydroguaiaretic acid</b>	500-38-9	No information	-	-
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## 8.2 Exposure controls

### Personal Protection

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

#### Respiratory protection

Where protective respiratory equipment is required, select NIOSH-approved equipment based on current or potential airborne contaminant concentrations and in accordance with appropriate regulatory standards and/or industry recommendations.

#### Protection for the hands

Handle with chemical resistant gloves. Gloves should be inspected prior to use. Use proper glove removal technique (without touching the outer surface of the glove) to avoid skin contact with this product. Wash and dry your hands.

#### Eye protection

Safety glasses with side shields conforming to EN166. Wear eye protection equipment tested and approved to appropriate government standards such as NIOSH (USA) or EN 166 (EU).

#### Skin and body protection

Full chemical protective suit, coveralls, gloves, protective eyewear, closed shoes, socks. The type of protective equipment should be chosen according to the concentration and amount of hazardous substance at the specific workplace.

#### General protective and hygienic measures

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

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Essential physical and chemical properties

<b>Shape</b>	Liquid
<b>Color</b>	Ochre
<b>Odor</b>	Intense creosote smell
<b>pH</b>	5.0 - 6.0
<b>Density g/mL (20°C)</b>	0.9 - 1.0
<b>Solubility in water</b>	No information available
<b>Flash point</b>	No information available
<b>Viscosity, dynamic</b>	No information available

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## SECTION 10. STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	No information available
<b>10.2 Chemical stability</b>	Stable under recommended storage conditions.
<b>10.3 Possibility of harmful reactions</b>	None under normal processing.
<b>10.4 Conditions to avoid</b>	High temperatures, storage where the product is exposed to direct sunlight.
<b>10.5 Incompatible materials</b>	Strong oxidizing agents.
<b>10.6 Hazardous decomposition products</b>	In case of fire toxic fumes may be produced, containing carbon monoxide and carbon dioxide.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

<b>Acute oral toxicity</b>	DL50 (rat): 2000 mg/Kg
<b>Acute inhalation toxicity</b>	No information available
<b>Acute dermal toxicity</b>	No information available
<b>Skin irritation (rabbit)</b>	Mildly irritant
<b>Eye irritation (rabbit)</b>	Mildly irritant
<b>Sensitization (guinea pig)</b>	Sensitizing
<b>Chronic Toxicity/Effects</b>	
<b>Symptoms</b>	See section 4.2
<b>Carcinogenicity</b>	No carcinogenic effects
<b>Mutagenicity</b>	Non mutagenic
<b>Neurological effects</b>	No information available
<b>Reproductive toxicity</b>	No risk has been demonstrated

## SECTION 12. ECOTOXICOLOGICAL INFORMATION

### 12.1 Toxicity

<b>Toxicity to fish</b>	CL <sub>50</sub> - ( <i>Oncorhynchus mykiss</i> ) Rainbow trout - 96h = No information available.
<b>Toxicity to aquatic invertebrates</b>	CE <sub>50</sub> - ( <i>Daphnia magna</i> ) Large sea flea - 48h = No information available.

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<b>Toxicity to aquatic plants</b>	Information not available
<b>Persistence and degradability</b>	
<b>Biodegradability</b>	Information not available
<b>12.3 Bio-accumulation potential</b>	
<b>Bioaccumulation</b>	Information not available
<b>12.4 Mobility in soil</b>	
<b>Mobility in soil</b>	Information not available
<b>12.5 Other adverse effects</b>	
Additional ecological information	Information not available

## SECTION 13. DISPOSAL INFORMATION

### 13.1 Disposal of the substance (waste):

Dispose of contents/container in accordance with local regulations. Triple rinse the empty container and pour the resulting rinse water into the tank or container where the application mixture is prepared. Handle the empty container and product residues in accordance with the provisions of the General Law for the Prevention and Integral Management of Waste, its regulations or the management plan for empty pesticide containers, registered with SEMARNAT.

## SECTION 14. TRANSPORTATION INFORMATION

In accordance with NOM-002-SCT/2011

<b>63</b>
<b>2902</b>

<b>14.1 UN Number</b>	2902
<b>14.2 Official Transport Designation of the United Nations</b>	TOXIC LIQUID PESTICIDE, N.O.S.
<b>14.3 Transport hazard class(es)</b>	6.1
<b>14.4 Packaging group</b>	III
<b>14.5 Environmental hazard label</b>	YES
<b>14.6 Hazard identification number</b>	63

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## SECTION 15. REGULATORY INFORMATION (MEXICO)

NOM-010-STPS-2014, Chemical pollutants in the work environment-Recognition, evaluation and control.  
NOM-018-STPS-2015, Harmonized system for the identification and communication of hazards and risks from hazardous chemicals in the workplace.  
NOM-232-SSA1-2009, Pesticides: which establishes the requirements for the packaging, packing and labeling of technical grade products for agricultural, forestry, livestock, gardening, urban, industrial and domestic use.  
NOM-002-SCT/2011, List of the most commonly transported hazardous substances and materials.

## SECTION 16. OTHER INFORMATION

### Text of the hazard statements mentioned in Section 2

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