

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 1 of 9

SECTION 1. PRODUCT AND MANUFACTURER IDENTIFICATION

1.1 Product Identification

Trade Name: **AGROSHIELD**
Name of the Active Ingredient: Hydrogen tetraoxophosphate (V): phosphoric acid

1.2 Identified uses of the substance or mixture

Use: Insecticide/ Acaricide for agricultural use

1.3 Supplier or manufacturer data.

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

1.4 Número de teléfono en caso de emergencia en el transporte: 800 00 214 00
(ANIQ-SETIQ) 24 hrs (55) 5559 1588
Poison 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 H302	Category 4 Harmful if swallowed
Acute Inhalation Toxicity H333	Category 5 May be harmful if inhaled
Acute Dermal Toxicity H313	Category 5 May be harmful in contact with skin
Skin Corrosion/ Irritation H315	Category 2 Causes skin irritation

2.2 GHS label elements, including precautionary phrases:

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

Hazard-determining components for labeling:

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 2 of 9

Symbol(s)



Warning word: WARNING

Hazard statements

H302	Harmful if swallowed
H333	May be harmful if inhaled
H313	May be harmful in contact with skin
H315	Causes skin irritation

Cautionary advice.

P261	Avoid breathing dust, fumes/gas/mist/mist/vapours/spray.
P271	Use only outdoors or in a well ventilated area.
P273	Do not release into the environment.
P280	Wear protective gloves/protective clothing/eye/face protection.
P304 + P340	IN CASE OF INHALATION: Remove victim to fresh air and keep at rest in a position that makes breathing easier.
P312	Call a POISON CENTER or doctor if the victim feels unwell.
P370 + P378	In case of fire: Use (See section 5.1 of this SDS) to extinguish.
P391	Collect any spillage.
P403	Store in a well ventilated area.
P403 + P233	Store in a well-ventilated area. Keep container tightly closed.
P405	Keep in a locked storage area.
P501	Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards not contributing to the classification.

No hazards identified

SECTION 3. COMPOSITION/INFORMATION ON COMPONENTS

Type of formulation: Aqueous solution

Active ingredient: Hydrogen tetraoxophosphate (V): phosphoric acid

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 3 of 9

Hazardous components

NAME	CAS No.	CONCENTRATION
Hydrogen tetraoxophosphate (V): phosphoric acid	7664-38-2	10%; equivalent to 106.83g/L

Other information.

No information 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 the patient warm and at rest.

Inhalation

Make sure the victim is breathing without difficulty. If unable to breathe, remove secretions and foreign bodies from airways and provide mouth-to-mouth resuscitation using a cloth as a barrier and transport immediately to the nearest medical facility.

Contact with the skin

Wash the affected area with soap and clean water and remove contaminated clothing from the victim.

Contact with the eyes

Wash for at least 15 minutes with clean water.

Ingestion

If the product has been swallowed, do not induce vomiting; if necessary, only a physician can do so by inserting a finger down the throat or administering warm salt water. If the person is unconscious, make sure that he/she can breathe without difficulty; and do not try to introduce anything into his/her mouth.

4.2 Main symptoms and acute and chronic effects

Signs and Symptoms

By inhalation: Causes allergic rhinitis, nasal congestion and runny nose, sudden respiratory distress, inflammation of the mouth and larynx, allergic pulmonary reaction, tingling sensation and numbness of the tongue, lip and eyelids, rarely tremors and difficulty in walking. Low blood pressure or hypotension, tachycardia with the sensation of palpitations, dizziness or loss of consciousness may occur.

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 4 of 9

Oral route: it is rapidly absorbed and depending on the quantity absorbed, in addition to the above symptoms, it also causes alterations to the central and peripheral nervous system.

Dermal route. Rash, numbness, burning and tingling (generally resolves after 12 hours).

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

Antidote and treatment

Wash the patient with plenty of soap and water. Treat asthma or anaphylaxis with adrenaline at a ratio of 1:1000 by administering 0.1 to 0.5 ml I.M. or very slow I.V.; repeat if necessary. Administer hydrocortisone or equivalent: 50 to 100 mg I.V. Manage rhinitis orally with antihistamines and decongestants. In case of ingestion, pump the stomach, administer activated charcoal 30-50 g in 200 ml of water, followed by 15 g of sodium sulfate dissolved in water as a cathartic; repeat the administration of activated charcoal every 6 hours and the sodium sulfate every 12 hours, for 24 to 48 hours depending on the amount of toxic substance ingested. Treat nervous system symptoms with diazepam 5-10 mg in adults and 0.1 mg/kg in children.

SECCIÓN 5. FIRE SAFETY MEASURES

5.1 Extinguishing agents.

Suitable

Alcohol-resistant foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

5.2 Specific hazards arising from the mixture

Toxic carbon monoxide, carbon dioxide, hydrogen cyanide and hydrogen bromide based fumes.

5.3 Recommendations for fire-fighting personnel

Special protective equipment for firefighting personnel

Qualified personnel should enter the affected area wearing special firefighting clothing, self-contained breathing apparatus and safety glasses with lateral shielding.

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

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 5 of 9

Safe handling precautions

Keep people away from the leakage area and upwind of the product. 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

Do not allow product to enter surface water, sewage system and ground water. Avoid discharge into the environment.

6.3 Containment and clean-up methods and material

Cleaning methods

Collect with an inert absorbent product (e.g. sand, diatomite, acid fixative, universal fixative, sawdust). Store in appropriate closed 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

COMPONENTS	CAS No.	PARAMETROS DE CONTROL	CURRENT	BASELINE
Hydrogen tetraoxophosphate (V)	7664-38-2	No information	-	-

8.2 Individual protection measures, such as personal protective equipment

Personal protection

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 6 of 9

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	When respiratory equipment is required, select NIOSH approved equipment based on actual or potential airborne contaminant concentrations and in accordance with appropriate regulatory standards and/or industry recommendations.
Protection of 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 hands.
Protection of the eyes	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 all personal protective equipment according to the manufacturer's instructions. Store and wash personal protective equipment separately from other clothing.

SECCIÓN 9. PROPIEDADES FÍSICAS Y QUÍMICAS

9.1 Propiedades físicas y químicas básicas

Shape	Liquid
Color	No information available
Odor	No information available
pH	No information available
Specific gravity (20°C)	No information available
Solubility in water	High
Flash point	No information available
Viscosity, dynamic	No information available
Other information	No information available

SECTION 10. STABILITY AND REACTIVITY

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 7 of 9

10.1 Reactivity	Soluble in water with minor release of heat.
10.2 Chemical stability	Hygroscopic. Soluble in water. Reacts with water to generate heat and phosphoric acid, the reaction is not violent.
10.3 Possibility of hazardous reactions	No information available.
10.4 Conditions to avoid	High temperatures, storage where the product is exposed to direct sunlight.
10.5 Incompatible materials	No information available.
10.6 Hazardous decomposition products	In case of fire, toxic fumes may be formed, based on carbon monoxide, carbon dioxide, hydrogen cyanide and hydrogen bromide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	DL50 (rat): 1530 mg/Kg
Acute inhalation toxicity	CL50(rat) > 850 mg/L
Acute dermal toxicity	DL50 (rabbit) >2740 mg/Kg
Skin irritation (rabbit)	Irritant
Eye irritation (rabbit)	Irritant
Skin sensitization (guinea pig)	Non-sensitizing

Chronic Toxicity/Effects

Symptoms	See section 4.2
Carcinogenicity	No carcinogenic effects
Mutagenicity	No mutagenic effects
Neurological effects	No neurotoxic effects
Reproductive toxicity	No risk has been proven

SECTION 12. ECOTOXICOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	CL ₅₀ - (<i>Oncorhynchus mykiss</i>) Rainbow trout - 96h = 87 mg/L.
Toxicity to aquatic invertebrates	CE ₅₀ - (<i>Daphnia magna</i>) Large sea flea - 48h = 105 mg/L
Toxicity to aquatic plants	No information available

12.2 Persistence and degradability

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 8 of 9

Biodegradability	Not persistent
12.3 Bio-accumulation potential	
Bioaccumulation	There is risk of bioaccumulation
12.4 Mobility in soil	
Mobility in soil	Not expected to be mobile in the soil
12.5 Other adverse effects	
Additional ecological information	No information available

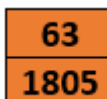
SECTION 13. DISPOSAL INFORMATION

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.

SECTION 14. TRANSPORTATION INFORMATION

In accordance with NOM-002-SCT/2011



14.1 UN Number	1805
14.2 Official Transport Designation of the United Nations	PHOSPHORIC ACID SOLUTION
14.3 Transport hazard class(es)	6.1
14.4 Packaging group	III
14.5 Environmental hazard label	YES
14.6 Hazard identification number	63

SECTION 15. REGULATORY INFORMATION (MEXICO)

NOM-010-STPS-2014, Chemical pollutants in the workplace-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.

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.

	SAFETY DATA SHEET (SDS) AGROSHIELD	
		Edition 1-00
		Page 9 of 9

NOM-232-SSA1-2009, Pesticides: Establishing 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

AGROSHIELD

The information is believed to be correct, but it is not comprehensive and is to be used only as general information, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.