

MATERIAL SAFETY DATA SHEET

MSDS



FULLTEC ARROW

MSDS PRO FER
Revision 03
08/07/2024
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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Fulltec Arrow.

INTERNAL PRODUCT IDENTIFICATION CODE: Not available.

MAIN RECOMMENDED USES FOR THE PRODUCT: Exclusively agricultural use.

COMPANY NAME: Latina Agro Indústria e Comércio de Fertilizantes Ltda.

ADDRESS: Rodovia PR-317, 8.001, Parque Industrial Sul, CEP 87065-005, Maringá, PR, Brazil.

CONTACT PHONE: +55 (44) 3046-2600

EMERGENCY PHONE:

POISONING AND/OR POISONING: 0800-722-6001 (RENACIAT)

ENVIRONMENTAL ACCIDENTS: 0800-942-2105 (CETRIC)

EMAIL: contato@spraytec.com

2. HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

- Skin corrosion/irritation – Category 1A
- Corrosive to metals – Category 1
- Severe eye injuries/eye irritation – Category 1
- Hazardous to the aquatic environment – Acute – Category 3
- Skin sensitization – Category 1
- Acute toxicity – Oral – Category 5
- Reproductive toxicity – Category 1B

GS LABELING ELEMENTS:

- **PICTOGRAMS:**



- **WORD OF WARNING:**
- **DANGER PHRASES:**

DANGER

H290 can be corrosive to metals.

H303 May be harmful if swallowed.

H314 Causes severe skin burn and eye damage.

H317 May cause allergic skin reactions.

H360 May harm fertility or the fetus.

H402 Harmful to aquatic organisms.

- **CAUTIONARY PHRASES:**

- **GENERAL:**

- **PREVENTION:**

P102 Keep out of reach of children.

Q103 Read the label before using the product.

P201 Get specific instructions before use.

P202 Do not handle the product until you have read and understood all safety precautions.

P234 Store only in the original container.

P260 Do not inhale dust/fumes/gases/mists/vapors/aerosols.

P261 Avoid inhaling dust/fumes/gases/mists/vapours/aerosols.

Rodovia PR 317, 8065 - Zona 47 Maringá-PR Cep: 87.065-005

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– **EMERGENCY RESPONSE:**

P264 Wash thoroughly after handling.
P272 Contaminated work clothing may not leave the workplace.
P273 Avoid release into the environment.
P280 Wear protective gloves/protective clothing/eye protection/face shield.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P302 + P352 IN CASE OF CONTACT WITH SKIN: Wash with plenty of soap and water.
P303 + P361 + P353 IN CASE OF SKIN (or hair) CONTACT: Immediately remove all contaminated clothing. Rinse your skin with water/take a shower.
P304 + P340 IN CASE OF INHALATION: Remove the person to a ventilated place and keep him at rest in a position that does not hinder breathing.
P305 + P351 + P338 IN CASE OF CONTACT WITH EYES: Rinse thoroughly with water for several minutes. In the case of contact lens wear, remove them if it is easy. Continue rinsing.
P308 + P313 IF EXPOSURE or suspected exposure: Consult a physician.
P310 Contact a POISON CONTROL CENTER or a physician immediately.
P312 If you feel unwell, contact a POISON CENTER/doctor.
P321 Specific treatment.
P333 + P313 In case of skin irritation or rash: Consult a doctor.
P362 + P364 Remove all contaminated clothing and wash it before using it again.
P363 Wash contaminated clothing before using it again.
P390 Absorb the spilled product in order to avoid material damage.
P405 Store in a lockable place.
P406 Store in a corrosion-resistant container/with a heavy-duty inner lining.
P501 Dispose of the contents/container in compliance with local regulations.

– **STORAGE:**

– **DISPOSITION:**

OTHER HAZARDS THAT DO NOT RESULT IN A RATING: Not applicable.

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3. COMPOSITION AND INGREDIENT INFORMATION

MIXTURE

Classification: Mixed mineral fertilizer;

Grade: Foliar fertilizer;

Type of formulation: Fluid (suspension).

INGREDIENTS OR IMPURITIES THAT CONTRIBUTE TO THE HAZARD:

COMMON CHEMICAL NAME OR TECHNICAL NAME	CAS REGISTRATION NUMBER	CONCENTRATION OR CONCENTRATION RANGE (%)
Industrial secret 01	Industrial secret 01	5 – 10
Industrial secret 02	Industrial secret 02	1 – 5
Industrial secret 03	Industrial secret 03	0,05 – 0,20
Industrial secret 04	Industrial secret 04	0,05 – 0,20
Calcium chloride	10035-04-8	17 – 20
Urea	57-13-6	10 – 11
Magnesium Chloride	7791-18-6	8 – 9
Potassium Chloride	7447-40-7	4 – 6
Sodium Octoborate	12280-03-4	3 – 4
Zinc Chloride	7646-85-7	2 – 3

4. FIRST AID MEASURES

- **INHALATION:** Remove the person to a ventilated place and keep him at rest in a position that does not hinder breathing. Contact a POISON CONTROL CENTER or physician immediately. Specific treatment. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER/doctor.
- **SKIN CONTACT:** Immediately remove all contaminated clothing. Rinse your skin with water/take a shower. Wash with plenty of soap and water. Wash contaminated clothing before using it again. Contact a POISON CONTROL CENTER or physician immediately. Specific treatment. In case of skin irritation or rash: Consult a doctor.
- **EYE CONTACT:** Rinse thoroughly with water for several minutes. In the case of contact lens wear, remove them if it is easy. Continue rinsing. Contact a POISON CONTROL CENTER or physician immediately.
- **INTAKE:** Rinse mouth. DO NOT induce vomiting. Contact a POISON CONTROL CENTER or physician immediately. Specific treatment. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER/doctor.

MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE OR LATE: In case of skin irritation or rash: Consult a doctor. Specific treatment. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER/doctor.

NOTES TO THE DOCTOR: Not available.

5. FIREFIGHTING MEASURES

MEANS OF EXTINGUISHING: NON-FLAMMABLE product. Fight the fire according to the propagating agent.

SUBSTANCE OR MIXTURE-SPECIFIC HAZARDS: It can generate toxic and irritating gases under high temperature or flame conditions.

FIREFIGHTING TEAM PROTECTION MEASURES: Wear personal protective equipment with self-contained positive pressure breathing and firefighting clothing. Protect your eyes with chemical-resistant glasses.

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6. CONTROL MEASURES FOR SPILLAGE OR LEAKAGE

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

- **FOR PERSONNEL WHO ARE NOT PART OF THE EMERGENCY SERVICES:** Evacuate and cordon off the area.
- **FOR EMERGENCY SERVICE PERSONNEL:** Wear full PPE, safety glasses, safety gloves, appropriate protective clothing and safety shoes. In case of large leaks, where exposure is great, it is recommended to use a respiratory protection mask with a dust filter.

ENVIRONMENTAL PRECAUTIONS: Contain leaks and keep them away from manholes and bodies of water. Verify if there has been contamination of the drinking water supply.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: For small leaks, carefully contain the spill. For large leaks, carefully contain the spill. Stop the flow and keep away from rivers and streams. Check for contamination in the drinking water supply.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Use the appropriate PPE. Avoid physical damage to the containers.

SAFE STORAGE CONDITIONS, INCLUDING ANY INCOMPATIBILITY: The product should be stored in a cool, dry, ventilated place and away from direct sunlight. Protect the package from physical damage. Keep the product in its original packaging. The following are incompatible with the product: strong bases, oxidizing products and metals that can be reacted with acid.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

CONTROL PARAMETERS: Not available.

ENGINEERING CONTROL MEASURES: Not available.

PERSONAL PROTECTION MEASURES:

- **EYE/FACE PROTECTION:** Wear chemical-resistant goggles with side protection to prevent splashing.
- **SKIN PROTECTION:** Wear waterproof clothing, boots and rubber gloves.
- **RESPIRATORY PROTECTION:** Wear a mask with a P2 particulate filter.
- **THERMAL HAZARDS:** Not applicable.

9. PHYSICAL AND CHEMICAL PROPERTIES

ASPECT: Liquid at room temperature, white.

ODOR AND ODOR LIMIT: Slight phosphoric odor.

pH: 4.70 to 5.90 (2.0 ml/L solution).

MELTING POINT/FREEZING POINT: Not available.

INITIAL BOILING POINT AND BOILING TEMPERATURE RANGE: Not available.

FLASH POINT: Not available.

EVAPORATION RATE: Not available.

FLAMMABILITY (SOLID; GAS): Not available.

LOWER/UPPER FLAMMABILITY OR EXPLOSIVENESS LIMIT: Not available.

VAPOR PRESSURE: Not available.

VAPOR DENSITY: Not available.

RELATIVE DENSITY: 1.27 to 1.33 g.cm⁻³

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SOLUBILITY(S): Not available.

PARTITION COEFFICIENT – n-OCTANOL/WATER: Not available.

AUTOIGNITION TEMPERATURE: Not available.

DECOMPOSITION TEMPERATURE: Not available.

VISCOSITY: Not available.

10. STABILITY AND RESPONSIVENESS

REACTIVITY: Not available.

CHEMICAL STABILITY: Stable product under normal conditions of use.

POSSIBILITY OF DANGEROUS REACTIONS: Not available.

CONDITIONS TO BE AVOIDED: High temperatures and direct exposure to the sun. Avoid contact with strong bases, oxidizing products and metals that can be affected by acid.

INCOMPATIBLE MATERIALS: Strong bases, oxidizing products and metals that can suffer reaction with acid.

DECOMPOSITION HAZARDOUS PRODUCTS: Not available.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Not available.

SKIN CORROSION/IRRITATION: Not available.

SERIOUS EYE INJURIES/EYE IRRITATION: Not available.

RESPIRATORY OR SKIN SENSITIZATION: Not available.

GERM CELL MUTAGENICITY: Not available.

CARCINOGENICITY: Not available.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Not available.

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): Not available.

ASPIRATION HAZARD: Not available.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Not available.

PERSISTENCE AND DEGRADABILITY: Not available.

BIOACCUMULATIVE POTENTIAL: Not available.

GROUND MOBILITY: Not available.

OTHER ADVERSE EFFECTS: Not available.

13. CONSIDERATIONS ON FINAL DISPOSAL

RECOMMENDED METHODS FOR FINAL DISPOSAL: Try to reuse the product. Properly collect and store the spilled product for later reuse or final disposal. Consult your local environmental control agency. Wash the used packaging with water and use the water in the application of the product. The packaging can be recycled.

14. TRANSPORTATION INFORMATION

NATIONAL AND INTERNATIONAL REGULATIONS:

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- **LAND:** Product not classified as dangerous for land transport according to the National Land Transport Agency (ANTT).
- **WATERWAY:** Product not classified as dangerous for waterway transport according to the International Maritime Dangerous Goods (IMDG) Code; NORMAM-05 of the Directorate of Ports and Coasts (DPC) of the Brazilian Navy; and the National Waterway Transport Agency (ANTAQ).
- **AIR:** Product not classified as dangerous for air transport according to the International Civil Aviation Organization – Technical Instructions (ICAO-TI), International Air Transport Association – Dangerous Goods Regulations (IATA-DGR); and National Civil Aviation Agency (ANAC).

15. REGULATORY INFORMATION

SPECIFIC SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS FOR THE CHEMICAL: Not available.

16. OTHER INFORMATION

IMPORTANT INFORMATION, BUT NOT SPECIFICALLY DESCRIBED IN THE PREVIOUS SECTIONS: The information contained herein is merely for guidance and is given in good faith, without incurring express or implied liability. It is up to you to use it in accordance with applicable federal, state, and local laws and regulations. If there is a need for clarification or additional information, please consult Spraytec or representatives.

This document was prepared in accordance with the criteria of NBR 14725. V9.

REFERENCES:

- IFA – Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung. GESTIS Substance Database. Available at: <https://gestis-database.dguv.de/>. Accessed on: June 10, 2022.

SUBTITLES AND ABBREVIATIONS:

- ABNT: Brazilian Association of Technical Standards
- CAS: Chemical Abstract Service
- CE50: Effective concentration 50%
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- NBR: Brazilian Regulatory Standard
- pH: Hydrogen potential
- RENACIAT: National Network of Toxicological Information and Assistance Centers