

Product: NITROGEN DUO

Date: 14/06/2022

Nº: 117/2022

Review: 01

1) Product and Company Identification:**Product: NITROGEN DUO****PRODUCT IDENTIFIER:** Mixture based on NBPT.**Synonyms/ General Names:** Additive for volatilization of nitrogen fertilizers.**CONTACT INFORMATION****Distributor / Manufacturer:** FertMinas Soluções para Fertilizantes,
Santos Guido Ave, 400, Uberaba/MG – Brazil**EMERGENCY PHONE NUMBERS**Telephone: For Information: (+55) (34) 9 9192-2000 / (34) 9 9195-9000
For Emergency: (+55) (34) 3316-2017**RELEVANT USES**

This product is a high performance liquid additive/adjutant for fertilizer coating, is used in agriculture.

2) Hazard Identification:**Classification of the substance or mixture****Classification
(REGULATION (EC)
Nº 1272/2008)**Reproductive toxicity – Category 2, H360D
Eye irritation, Serious eye damage, Category 1, H319.
For the full text of the H-Statements referred to in this section, see section 16.**Pictograms**

Risk Pictograms

Word of warning
Danger
danger phrases
H360D May harm an unborn baby.
H319 Causes serious eye irritation.**3) Composition Information on Ingredients:****Product Type:** Mixture

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Composition:

Mixture based on NBPT (triamide N-buty thiophosphate), vehicle and dye.

4) First Aid Measures:

Eye contact: Immediately flush with running water for at least 15 minutes while holding eyelids open. If irritation persists, consult a physician.

Skin contact: Wash off with mild soap and water. Remove contaminated clothing

Ingestion: Do not induce vomiting. Consult a doctor.

5) Fire extinguishing measures:

Extinguishing media:

Chemical, water mist, carbon dioxide.

Specific hazards of the mixture:

Not applicable

Protective equipment Individual:

Proper protective gloves, safety goggles and protective clothing. Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.



6) Accidental Release Measure

Personal Precautions:

Wear personal protective equipment (safety shoes, goggles, and gloves).

Environmental Concerns:

Prevent product from coming into contact with sewage system or waterways.

Neutralization and Disposal:

Contain the spill using an absorbent substance such as sand or earth, thus preventing the product from spreading.

Collect and dispose of in an appropriate waste disposal facility. The product should not be disposed of via wastewater or waterways.

7) Handling and Storage:

Handling:

Avoid contact with eyes and skin.

Use Personal Protective Equipment (Safety shoes, goggles and gloves)

Storage:

The product should be stored in a dry and ventilated place, away from sun exposure and moisture

8) Exposure controls and personal protection:

Personal Protective Measures:

Avoid spills as it may leave the floor slippery

Control measures:

It is recommended to promote mechanical ventilation or direct exhaust system to the external environment.

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Emergency showers and eye washes are recommended in the work area.

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Exposure guidelines: Vegetable Resin : OSHA PEL: N/A,

OSHA-PEL: 15mg/m³ total dust (based on 8-hour time weighted average exposure)
5mg/m³ airborne dust

Cal OSHA-PEL: 10 mg/m³

BIOLOGICAL LIMIT VALUES: None determined

9) Physical and Chemical Properties:

Molecular formula	Natural Product.	Appearance	Liquid.
Molecular weight	N/A.	Odor	Faint odor.
Specific Gravity	~1.1-1.3 g/mL @ 25°C.	Odor Threshold	N/A.
Vapor Density (air=1)	N/A.	Solubility	Soluble.
Melting Point	N/A.	Evaporation rate	N/A. (<i>Butyl acetate = 1</i>).
Boiling Point/Range	N/A.	Partition Coefficient	N/A. (<i>log P_{ow}</i>).
Vapor Pressure (20°C)	N/A.	pH	5 - 7
Flash Point:	> 170°C	LEL	N/A.
Autoignition Temp.:	N/A.	UEL	N/A.

N/A = Not available or applicable

10) Stability and Reactivity:

Avoid heat and moisture.

Stability: Stable under normal conditions of use and storage.

Incompatibility: Oxidizing materials.

Shelf life: Indefinite if stored properly.

11) Toxicology:

Acute Symptoms/Signs of exposure:

Eyes: Redness, tearing, itching, burning, conjunctivitis.

Skin: Redness, itching.

Ingestion: Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain.

Inhalation: Irritation of mucous membranes, coughing, wheezing, shortness of breath,

Chronic Effects: No information found.

Sensitization: none expected.

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Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

12) Ecological Information:

Mobility: not applicable because it is a solid product and insoluble in water.

Expected behavior: stable product.

Environmental Impact: The residues do not cause pollution and can be landfilled.

13) Disposal Considerations:

Not classified as hazardous waste. Dispose in accordance with applicable Federal, state and local law regulations.

14) Shipping Information:

Non-hazardous material according to transport regulations. No special precautions are necessary.

15) Regulatory Information:

EINECS: Listed (not available).

WHMIS Canada: Not WHMIS Controlled.

TSCA: All components are listed or are exempt. **California Proposition 65:** Not listed.

REACH: There is no registration number available for this substance, since that the substance or its use are exempt from registration of according to Article 2 of REACH (EC) No. 1907/2006, the annual tonnage does not require registration or registration is scheduled for a later date.

16) Other Information:

This MSDS was prepared based on current product knowledge and on protection, safety, health and the environment.

It is warned that the handling of any chemical substance requires prior knowledge of its dangers by the user. It is up to the company that uses the product to promote the training of its employees and contractors regarding the possible risks arising from the product.

The conditions or methods of handling and storage, use and disposal are under our control and knowledge. For this and other reasons, we assume no liability for claims for any losses, damages or expenses related to the handling, storage, use or disposal of the product.

Literature References:

1. ECOTOX: <http://www.epa.gov/ecotox>
2. TOXNET: <http://www.toxnet.nlm.nih.gov>