

# **NutraFix Fertilizer**

**Safety Data Sheet** 

According to Federal Register / Vol. 89, No. 98 / May 20, 2024 / Rules and Regulations Date of issue: 05/13/2020 Revision date: 11/11/24 Supersedes: 08/12/2020 Version: 4.0

#### **SECTION 1: Identification**

1.1 Identification

Product Form: Mixture

Product Name: NutraFix Fertilizer

1.2 Recommended use and restrictions on use

Use of the Substance/Mixture Fertilizer

1.3 Supplier 1.4 Emergency telephone number

Emergency number: 24 Hour Emergency

Manufacturer: Edaphix LLC.

1075 Boylan Road HAZMAT Response: (800) 229-5252

Bozeman, MT 59715 – USA EPA National Response Center (800) 424-8802

T - 406-600-6563

#### **SECTION 2: Hazards(s) Identification**

#### 2.1 Classification of substance or mixture

**GHS-US** classification

Skin corrosion/irritation, Category 2315

Causes skin irritation

Serious eye damage/eye irritation, Category 2 H319

Causes serious eye irritation

Specific target organ toxicity – Single exposure, Category 3,

Respiratory tract irritation H335

May cause respiratory irritation

Reproductive toxicity, Category 2 H361

Suspected of damaging fertility or the unborn child

Full text of H statements: see section 16

# 2.2 GHS Label elements, including precautionary statements

**GHS-US** labeling

Hazard pictograms (GHS-US):



Signal word (GHS-US): Warning

H302- Harmful if swallowed

Hazard statements (GHS-US):

H315 – Causes skin irritation

H319 - Causes serious eye irritation

H361 - Suspected of damaging fertility or the unborn child

P201 - Review product label before use

P202 - Do not handle until all safety precautions have been read and understood

P261- Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash skin thoroughly after handling

P280 - Wear eye protection, protective clothing, protective gloves

P302+P352 – If on skin: Washing with plenty of water

Precautionary statements (GHS-US):

P304+P340 – If inhaled: remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing

P308+P313 - If exposed or concerned: Get medical advice/attention P332+P313 - If skin irritation occurs: Get medical attention P337+P313 - If eye irritation persists: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/container to comply with local, state, and federal regulations

# 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### **SECTION 3: Composition/Information on Ingredients**

#### 3.1 Substances

Not applicable

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3.2 Mixtures			
Name	Product Identifier	%	GHS-US classification
Disodium tetraborate pentahydrate	(CAS-No.) 12179-04-3	75-80	Eye Irrit. 2, H319 Repr. 2, H361
Monoammonium phosphate	(CAS-No.) 7722-76-1	5-10	Not Classified
Calcium sulfate (gypsum)	(CAS-No.) 7778-18-9	<= 5	Eye Irrit. 2B, H320 STOT SE 3, H335
Potassium magnesium phosphate	Not applicable	<= 5	Not Classified
iron(II)sulfate	(CAS-No.) 7720-78-7	<= 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319

Full text of hazard classes and H-statements: see section 16

#### **SECTION 4: First Aid Measures**

#### 4.1 Description of first aid measures

First-aid measures general: IF exposed or concerned: Get medical advice/attention First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing First-aid measures after skin Wash skin with plenty of water. Get medical attention if symptoms occur contact: First-aid measures after eye Rinse eyes with water as a precaution. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. contact: Call a poison center/doctor/physician if you feel unwell. If swallowed, seek medical advice immediately and show First-aid measures after ingestion: product container or label.

#### 4.2 Most important symptoms and effects (acute and delayed)

Symptoms/injuries after inhalation: May cause slight irritation

Symptoms/injuries after skin May cause slight irritation to the skin

contact:

Symptoms/injuries after eye Irritation to eyes

contact:

Symptoms/injuries after ingestion: May cause gastrointestinal discomfort

# 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically

# **SECTION 5: Fire-fighting Measures**

# 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray. Dry powder. Foam. Carbon dioxide

### 5.2. Specific hazards arising from the chemical

No additional information available

### 5.3. Special protective equipment and precautions for fire-fighters

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Protection during firefighting:

Complete protective clothing.

#### **SECTION 6: Accidental release measure**

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

#### 6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Do not attempt to take action without suitable protective equipment. For further information refer to section 8: Protective equipment:

"Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Sweep up spilled solid material, try not to create dust. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to Exposure-controls/personal protection

section 8:

# **SECTION 7: Handling and Storage**

#### 7.1. Precautions for safe handling

Ensure good ventilation. Review product label before use. Do not handle until all safety precautions have been read Precautions for safe handling

and understood. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the product. According to Federal Register / Vol. 89, No. 98 / May 20, 2024 / Rules and Regulations Date of issue: 05/13/2020 Revision date:11/11/24 Supersedes: 08/12/2020 Version: 4.0

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Store in a well-ventilated place. Keep cool. Avoid contact with water or humidity

Storage area Store in a cool, dry place

#### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

Disodium tetraborate pentahydrate (12179-04-3)		
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> – 10 hours
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> – 8 hours (Form: Inhalable fraction)
Monoammonium phosphate (7722-76-1)		
OSHA	OSHA PELS (mg/m³)	15 total dust, 5 respirable fraction
ACGIH	ACGIH TLVs (mg/m <sup>3</sup> )	10 total dust, 3 respirable fraction
Calcium sulfate (gypsum) (7778-18-9)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> total dust, 5 mg/m <sup>3</sup> respirable fraction
iron(II)sulfate (7720-78-7)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

Legend

OSHA: Occupational Safety and Health Administration TWA: Time-Weighted Average

PEL: Permissible Exposure Limit NIOSH: National Institute for Occupational Safety and Health

ACGIH: American Conference of Governmental Industrial

Hygienists

controls:

TLV: Threshold Limit Value

REL: Recommended Exposure Limit

#### 8.2. Appropriate engineering controls

Appropriate engineering

Ensure good ventilation.

Environmental exposure

controls: Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

Hand protection Protective gloves

Eye protection: Safety glasses should be worn where dust is generated and there is a potential that eye contact may occur.

Skin and body protection: Wear suitable protective clothing Respiratory protection: Wear respiratory protection

#### **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Appearance: Granules Oxidizing properties: No data available

Auto-ignition temperature: No data available

Pariting points

No data available

Physical states: Salid

Boiling point: No data available Physical state: Solid

Decomposition temperature: No data available Relative density: No data available Explosion limits: No data available Relative evaporation rate No data available

Explosive properties: No data available (butyl acetate=1): Flammability (solid, gas): No data available Relative vapor density

Flammability (solid, gas): No data available Relative vapor density No data available at 20 °C:

Freezing point : No data available Solubility: No data available Vapor pressure: No data available Melting point : No data available Viscosity, dynamic: No data available Viscosity, kinematic: No data available

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

# 10.2. Chemical stability

Stable under normal conditions.

# 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use

# 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

Strong reducing agents

#### 10.6. Hazardous decomposition products

No additional information available

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# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral):

Acute toxicity (dermal):

Acute toxicity (inhalation):

Not classified

Not classified

Disodium tetraborate pentahydrate (12179-04-3)	
LC50 inhalation (dust and mist) rat	>2 mg/l
LD50 dermal rabbit	>2000 mg/kg body weight
LD50 oral rat	3305 mg/kg body weight
Monoammonium phosphate (7722-76-1)	
LD50 oral rat	2000 mg/kg
LD50 dermal rat	5000 mg/kg
Calcium sulfate (gypsum) (7778-18-9)	
LD50 oral rat	>1584 mg/kg bodyweight
iron(II)sulfate (7720-78-7)	
LD50 oral rat	319 mg/kg
ATE US oral	319 mg/kg body weight

Skin corrosion/irritation: Direct contact may cause local irritation, but is not expected to cause significant tissue damage.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization:

Germ cell mutagenicity:

Not classified

Carcinogenicity:

Not classified

Reproductive toxicity: Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single

exposure:

May cause respiratory irritation

Specific target organ toxicity –

repeated exposure:

Not classified

Aspiration hazard: Not classified

Viscosity, kinematic No data available

Symptoms/injuries after inhalation: May cause slight irritation. Symptoms may include discomfort, coughing, sneezing, and shortness of breath.

Symptoms/injuries after skin contact: May cause slight irritation to the skin

Symptoms/injuries after eye contact: Irritation to eyes.

Symptoms/injuries after ingestion: May cause gastrointestinal discomfort

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the

environment.

Disodium tetraborate pentahydrate (1217	9-04-3)
EC50 Algae 1	52.4 mg/l (Pseudokirchneriella subcapitata)
LC50 Daphnia 1	91 mg/l (Ceriodaphnia dubia)
LC50 Fish 1	79.7 mg/l (Pimephales promelas)
NOEC Fish 2	6.4 mg/l (Brachydanio rerio)
NOEC Daphnia 2	14.2 mg/l (Daphnia magna)
NOEC Algae 2	17.5 mg/l (Pseudokirchneriella subcapitata)

Calcium sulfate (gypsum) (7778-18-9)	
LC50 fish 1	2980 mg/l (96 h; Lepomis macrochirus)
LC50 fish 2	> 56000 mg/l (96 h; Gambusia affinis)

iron(II)sulfate (7720-78-7)	
LC50 fish 1	925 mg/l (96 h; Poecilia reticulata; Heptahydrate)
EC50 Daphnia 1	7.2 mg/l (48 h; Daphnia magna; Metal ion)
LC50 fish 2	> 100 mg/l (96 h; Oryzias latipes; GLP)
EC50 Daphnia 2	152 mg/l (48 h; Daphnia magna; Heptahydrate)
Threshold limit algae 1	152 mg/l (48 h; Daphnia magna; Heptahydrate)
Threshold limit algae 2	3.2 mg/l (72 h; Pseudokirchneriella subcapitata; Heptahydrate)

# 12.2. Persistence and degradability

Disodium tetraborate pentahydrate (12179-04-3)	
Persistence and degradability	Not applicable, inorganic

Calcium sulfate (gypsum) (7778-18-9)	
Persistence and degradability	Not applicable

iron(II)sulfate (7720-78-7)	
Persistence and degradability	Biodegradable

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#### 12.3. Bioaccumulative potential

Disodium tetraborate pentahydrate (12179-04-3)	
Bioaccumulative potential	Low potential for bioaccumulation

# Calcium sulfate (gypsum) (7778-18-9) Bioaccumulative potential No bioaccumulation data available

iron(II)sulfate (7720-78-7)	
BCF fish 1	2 - 20 (28 days; Cyprinus carpio; Heptahydrate).
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

# 12.4. Mobility in soil

Disodium tetraborate pentahydrate (12179-04-3)	
Ecology – soil	The product is soluble in water and is leachable through normal soil.
	Adsorption to soils or sediments is insignificant.

#### 12.5 Other adverse effects

No additional information available.

#### **SECTION 13: Disposal Considerations**

#### 13.1. Disposal methods

Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

#### **SECTION 14: Transport Information**

Department of Transportation (DOT)
In accordance with DOT: Not applicable

TDG: Not applicable Air transport: Not applicable

# **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

Monoammonium phosphate (7722-76-1)	
Ingredients listed on the United States TSCA (Toxic Substances C	Control Act) inventory
Calcium sulfate (gypsum) (7778-18-9)	
Not listed on the United States TSCA (Toxic Substances Control A	ct) inventory
iron(II)sulfate (7720-78-7)	
Listed on the United States TSCA (Toxic Substances Control Act)	inventory
Not listed on SARA Section 313 (Specific toxic chemical listings)	-
CERCLA RQ	1000 lb

#### 15.2. International regulations

## Canada

Cal	cium sulfate (gypsum) (7778-18-9)
Liste	ed on the Canadian DSL (Domestic Substances List)

# EU-Regulations National regulations

No additional information available 
No additional information available

# 15.3. US State regulations

Component:
Calcium sulfate
Calcium sulfate
(7778-18-9):
U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List;
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List
(12179-04-3):
iron(II)sulfate
U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List;
(7720-78-7):
U.S. - Pennsylvania - RTK (Right to Know) List

# **SECTION 16: Other Information**

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# Full text of H-phrases:

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child

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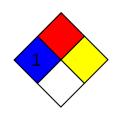
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NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 0 - Materials that will not burn.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

SDS US (GHS HazCom 2012)



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