

# Best Nitrex 19-3-5 with 3.4% Iron

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Best Nitrex 19-3-5 with 3.4% Iron  
Product code : M765512

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.3. Details of the supplier of the safety data sheet

JR Simplot Company  
Boise, ID 83707  
T 1-208-336-2110

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Eye Irrit. 2B H320  
STOT SE 3 H335

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H320 - Causes eye irritation  
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
P264 - Wash ... thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
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  
P312 - Call a poison center/doctor/... if you feel unwell  
P337+P313 - If eye irritation persists: Get medical advice/attention  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/container to ...

#### 2.3. Other hazards

No additional information available

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

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Calcium Ammonium Nitrate	(CAS No) 13780-11-5		Not classified

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Name	Product identifier	%	GHS-US classification
ammonium sulfate	(CAS No) 7783-20-2		Eye Irrit. 2B, H320 STOT SE 3, H335
Monoammonium Phosphate	(CAS No) 7722-76-1		Eye Irrit. 2B, H320 STOT SE 3, H335
potassium sulfate	(CAS No) 7778-80-5		Not classified
Iron Oxysulfate			Eye Irrit. 2B, H320
Sand			STOT SE 3, H335
wax (paraffins- petroleum)	(CAS No) 64771-72-8		Not classified
diatomaceous earth	(CAS No) 61790-53-2		Eye Irrit. 2B, H320 STOT SE 3, H335

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after eye contact : Causes eye irritation.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Reactivity : Stable.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

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

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Granules.

Colour : Off-white and gray

Odour : characteristic

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : Non-flammable

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : Soluble.  
Water: Solubility in water of component(s) of the mixture :  
• ammonium sulfate: 77 g/100ml • Monoammonium Phosphate: 38 g/100ml • potassium sulfate: 11 g/100ml • wax (paraffins- petroleum): insoluble • diatomaceous earth: insoluble

Log Pow : No data available

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

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### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>ammonium sulfate (7783-20-2)</b>	
LD50 oral rat	2840 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	2840.00000000 mg/kg bodyweight

<b>Monoammonium Phosphate (7722-76-1)</b>	
LD50 oral rat	5750 mg/kg (Rat)
LD50 dermal rat	> mg/kg
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
ATE US (oral)	5750.00000000 mg/kg bodyweight

<b>potassium sulfate (7778-80-5)</b>	
LD50 oral rat	6600 mg/kg (Rat)
ATE US (oral)	6600.00000000 mg/kg bodyweight

<b>wax (paraffins- petroleum) (64771-72-8)</b>	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes eye irritation.  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

<b>diatomaceous earth (61790-53-2)</b>	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified  
Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

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Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after eye contact : Causes eye irritation.

### SECTION 12: Ecological information

#### 12.1. Toxicity

<b>ammonium sulfate (7783-20-2)</b>	
LC50 fishes 1	126 mg/l (96 h; <i>Poecilia reticulata</i> )
EC50 Daphnia 1	202 mg/l (96 h; <i>Daphnia magna</i> )
LC50 fish 2	250 - 480 mg/l (96 h; <i>Brachydanio rerio</i> )
EC50 Daphnia 2	433 mg/l (50 h; <i>Daphnia magna</i> )
TLM fish 1	1290 ppm (96 h; <i>Gambusia affinis</i> )

<b>Monoammonium Phosphate (7722-76-1)</b>	
LC50 fishes 1	155 ppm (96 h; <i>Pimephales promelas</i> )

<b>potassium sulfate (7778-80-5)</b>	
LC50 fishes 1	1692.4 mg/l (96 h; <i>Alburnus alburnus</i> )
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
EC50 Daphnia 1	890 mg/l (48 h; <i>Daphnia magna</i> ; Static system)
LC50 fish 2	653 - 796 mg/l (96 h; <i>Lepomis macrochirus</i> )
EC50 Daphnia 2	1180 mg/l (96 h; Crustacea)
TLM fish 1	3550 ppm (96 h; <i>Lepomis</i> sp.)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit algae 1	2900 mg/l (72 h; <i>Scenedesmus subspicatus</i> )

#### 12.2. Persistence and degradability

<b>Best Nitrex 19-3-5 with 3.4% Iron</b>	
Persistence and degradability	Not established.

<b>ammonium sulfate (7783-20-2)</b>	
Persistence and degradability	Biodegradability in water: no data available. Not established.

<b>Monoammonium Phosphate (7722-76-1)</b>	
Persistence and degradability	Biodegradability in water: no data available. Not established.

<b>potassium sulfate (7778-80-5)</b>	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

<b>Iron Oxysulfate</b>	
Persistence and degradability	Not established.

<b>Sand</b>	
Persistence and degradability	Not established.

<b>wax (paraffins- petroleum) (64771-72-8)</b>	
Persistence and degradability	Readily biodegradable in water.

<b>diatomaceous earth (61790-53-2)</b>	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

#### 12.3. Bioaccumulative potential

<b>Best Nitrex 19-3-5 with 3.4% Iron</b>	
Bioaccumulative potential	Not established.

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<b>ammonium sulfate (7783-20-2)</b>	
Log Pow	-5.1
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
<b>Monoammonium Phosphate (7722-76-1)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.
<b>potassium sulfate (7778-80-5)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.
<b>Iron Oxysulfate</b>	
Bioaccumulative potential	Not established.
<b>Sand</b>	
Bioaccumulative potential	Not established.
<b>wax (paraffins- petroleum) (64771-72-8)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>diatomaceous earth (61790-53-2)</b>	
Bioaccumulative potential	No bioaccumulation data available. Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer : No additional information available  
Effect on the global warming : No known ecological damage caused by this product.  
Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT  
Not regulated for transport

### Additional information

Other information : No supplementary information available.

### ADR

Transport document description :

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Iron Oxysulfate	CAS No	C <sub>&gt;=</sub> 5.00% ; C <sub>&lt;=</sub> 10.00%
Sand	CAS No	C <sub>&gt;=</sub> 2.50% ; C <sub>&lt;=</sub> 3.50%
wax (paraffins- petroleum)	CAS No 64771-72-8	C <sub>&gt;=</sub> 0.10% ; C <sub>&lt;=</sub> 0.30%

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

#### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

### diatomaceous earth (61790-53-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information :  
: None.

Full text of H-phrases: see section 16:

Eye Irrit. 2B	Serious eye damage/eye irritation, Category 2B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

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