

Best Nitra King 21-2-4-2.0 Fe

Safety Data Sheet

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

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Best Nitra King 21-2-4-2.0 Fe
Product code : M827857

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

JR Simplot Company
P.O. Box 70013
Boise, ID 83707
T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

| | | |
|--|------|----------------------------------|
| Serious eye damage/eye irritation, Category 2B | H320 | Causes eye irritation |
| Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation | H335 | May cause respiratory irritation |

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS-US) :



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 hands, forearms and face 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 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 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. Substance

Not applicable

Best Nitra King 21-2-4-2.0 Fe

Safety Data Sheet

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

3.2. Mixture

| Name | Product identifier | % | GHS-US classification |
|----------------------------|---------------------|---|--|
| ASN-26 26-0-0 | | | Eye Irrit. 2B, H320 STOT SE 3, H335 |
| ammonium sulfate | (CAS No) 7783-20-2 | | Eye Irrit. 2B, H320 STOT SE 3, H335 |
| potassium sulfate | (CAS No) 7778-80-5 | | Not classified |
| Monoammonium Phosphate | (CAS No) 7722-76-1 | | Eye Irrit. 2B, H320 STOT SE 3, H335 |
| Iron Oxysulfate | | | Eye Irrit. 2B, H320 |
| wax (paraffins- petroleum) | (CAS No) 64771-72-8 | | Not classified |

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 : 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 person to fresh air and keep comfortable for breathing. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or 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. Wash skin with plenty of water.
- 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. Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

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

- Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after eye contact : Causes eye irritation.

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

5.2. Specific hazards arising from the chemical

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

5.3. Special protective equipment and precautions for fire-fighters

- 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. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate area.

Best Nitra King 21-2-4-2.0 Fe

Safety Data Sheet

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

6.2. Environmental precautions

Avoid release to the environment. 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 : Recover mechanically the product. On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

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

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wear personal protective equipment. 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.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Monoammonium Phosphate (7722-76-1)

Not applicable

potassium sulfate (7778-80-5)

Not applicable

Iron Oxsulfate

Not applicable

wax (paraffins- petroleum) (64771-72-8)

Not applicable

ASN-26 26-0-0

Not applicable

ammonium sulfate (7783-20-2)

Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Best Nitra King 21-2-4-2.0 Fe

Safety Data Sheet

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

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 | : Multi-colored |
| Odour | : characteristic |
| Odour threshold | : No data available |
| pH | : No data available |
| Melting point | : No data available |
| Freezing point | : Not applicable |
| Boiling point | : No data available |
| Flash point | : Not applicable |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Flammability (solid, gas) | : Non flammable. |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : Not applicable |
| Solubility | : Soluble. |
| Log Pow | : No data available |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : Not applicable |
| Viscosity, dynamic | : No data available |
| Explosive limits | : Not applicable |
| Explosive properties | : No data available |
| Oxidising properties | : 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

Not established.

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 |
|----------------|------------------|

Best Nitra King 21-2-4-2.0 Fe

Safety Data Sheet

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

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

| potassium sulfate (7778-80-5) | |
|-------------------------------|-----------------------|
| LD50 oral rat | 6600 mg/kg (Rat) |
| ATE US (oral) | 6600 mg/kg bodyweight |

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

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

| | |
|-----------------------------------|--------------------------|
| 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 |

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

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|--|
| Ecology - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |
|-------------------|--|

| Monoammonium Phosphate (7722-76-1) | |
|------------------------------------|-------------------------------------|
| LC50 fish 1 | 155 ppm (96 h; Pimephales promelas) |

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

| ammonium sulfate (7783-20-2) | |
|------------------------------|--------------------------------------|
| LC50 fish 1 | 126 mg/l (96 h; Poecilia reticulata) |
| EC50 Daphnia 1 | 202 mg/l (96 h; Daphnia magna) |

Best Nitra King 21-2-4-2.0 Fe

Safety Data Sheet

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

| ammonium sulfate (7783-20-2) | |
|------------------------------|--|
| LC50 fish 2 | 250 - 480 mg/l (96 h; Brachydanio rerio) |
| EC50 Daphnia 2 | 433 mg/l (50 h; Daphnia magna) |
| TLM fish 1 | 1290 ppm (96 h; Gambusia affinis) |

12.2. Persistence and degradability

| Best Nitra King 21-2-4-2.0 Fe | |
|---|--|
| Persistence and degradability | Not established. |
| Monoammonium Phosphate (7722-76-1) | |
| Persistence and degradability | Biodegradability in water: no data available. Not established. |
| potassium sulfate (7778-80-5) | |
| 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 |
| Iron Oxysulfate | |
| Persistence and degradability | Not established. |
| wax (paraffins- petroleum) (64771-72-8) | |
| Persistence and degradability | Readily biodegradable in water. |
| ASN-26 26-0-0 | |
| Persistence and degradability | Not established. |
| ammonium sulfate (7783-20-2) | |
| Persistence and degradability | Biodegradability in water: no data available. Not established. |

12.3. Bioaccumulative potential

| Best Nitra King 21-2-4-2.0 Fe | |
|---|---|
| Bioaccumulative potential | Not established. |
| Monoammonium Phosphate (7722-76-1) | |
| Bioaccumulative potential | Not bioaccumulative. Not established. |
| potassium sulfate (7778-80-5) | |
| Bioaccumulative potential | Not bioaccumulative. Not established. |
| Iron Oxysulfate | |
| Bioaccumulative potential | Not established. |
| wax (paraffins- petroleum) (64771-72-8) | |
| Bioaccumulative potential | No bioaccumulation data available. |
| ASN-26 26-0-0 | |
| Bioaccumulative potential | Not established. |
| ammonium sulfate (7783-20-2) | |
| Log Pow | -5.1 |
| Bioaccumulative potential | Bioaccumulation: not applicable. Not established. |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

Other information : Avoid release to the environment.

Best Nitra King 21-2-4-2.0 Fe

Safety Data Sheet

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

SECTION 13: Disposal considerations

13.1. Disposal methods

- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Product/Packaging 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

Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

TDG

Transport by sea

Air transport

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 | % |
| wax (paraffins- petroleum) | CAS No 64771-72-8 | % |
| ASN-26 26-0-0 | CAS No | % |

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

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, developmental and/or reproductive harm

SECTION 16: Other information

Other information : None.

Full text of H-statements:

| | |
|------|----------------------------------|
| H320 | Causes eye irritation |
| H335 | May cause respiratory irritation |

Best Nitra King 21-2-4-2.0 Fe

Safety Data Sheet

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

SDS US (GHS HazCom 2012)

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.