

SECTION 1 ; identification of the substance/mixture and of the company undertaking

1.1 Product identifier

| | |
|--------------|---------------------------|
| Product form | Liquid |
| Product name | Liquid complex fertilizer |
| Product code | NPK 3-0-9 |

1.2 Relevant identified uses of the substance or mixture a uses advised against

Use of the substance/mixture: For crop production, other industry

1.4 Details of the supplier of the safety data sheet

UAB Agrichem Innovation
Ramybės street 4-70, Vilnius,
LT-02103, Lithuania
T +37060504341 - F +37037430080
info@organic-fertilizer.eu www.organic-fertilizer.eu www.agricheminnovation.com

1.5 Emergency telephone number

Emergency number CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2 ; Hazards identification

2.1 Classification of the substance or mixture

GHS-US classification
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Full text of H-Phrases: see section 16

2.2 Label element

GHS-US labeling
Hazard pictograms (GHS-US)



GHS07

| | |
|-----------------------------------|---|
| Signal word (GHS-US) | Warning |
| Hazard statements (GHS-US) | H315 - Causes skin irritation H319 - Causes serious eye irritation |
| Precautionary statements (GHS-US) | P264 - Wash exposed skin thoroughly after handling P280 - Wear eye protection, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of soap and water P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove <i>contact lenses</i> , if present and easy to do. Continue rinsing P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated do thing and wash before reuse |

2.3 Other hazards

Other hazards not contributing to the classification Non applicable

2.4 Unknown acute toxicity (GHS-US)

Non applicable

SECTION 3 ; Composition/information or ingredients

3.1 Substance

Potassium ions, Nitrate ions and water.

3.2 Mixture

Derived: from natural mining sources

| Element | Element amount | % | Product identifier |
|--------------------------|----------------|---|--------------------|
| Nitrate Nitrogen (N-NO3) | 2.90 | % | (CAS No) |
| Potassium oxide (K2O) | 9.10 | % | (CAS No) |
| Water (H2O) | 78.87 | % | (CAS No) 7732-18-5 |
| Sodium chloride (NaCl) | 0.20 | % | (CAS No) |

SECTION 4 ; First aids and measures

4.1 Description of first aid and 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 | Assure fresh air breathing. Allow the victim to rest. |
| First-aid measures after skin contact | Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Wash immediately with lots of water. Get medical advice/attention. |
| First-aid measures after eye contact | Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. |
| 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 skin contact | : Causes skin irritation. |
| Symptoms /Injuries after eye contact | : Causes serious 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 Unsuitable extinguishing media | Foam. Dry powder. Carbon dioxide. Water spray. Sand. : Do not use a heavy water stream. |
|---|--|

5.2 Special hazards arising from the substance or mixture

| | |
|------------------|------------------|
| Fire hazard | : Not flammable. |
| Explosion hazard | : Not available |

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

| | |
|------------------|---|
| General measures | : Eliminate ignition sources. Evacuate area. Use protective clothing. |
|------------------|---|

6.2 For non-emergency personnel

| | |
|----------------------|---------------------------------|
| Emergency procedures | Evacuate unnecessary personnel. |
|----------------------|---------------------------------|

6.3 For non-emergency responders

| | |
|--|--|
| Protective equipment Emergency procedures | Equipment cleanup crew with proper protection. Ventilate area. |
|--|--|

6.4 Environmental precautions

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

6.5 Methods and material for containment and cleaning up

| | |
|-------------------------|--|
| Methods for cleaning up | Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. |
|-------------------------|--|

6.6 Reference to other sections

See Heading 8. Exposure controls and personal protection.

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 vapor.

Hygiene measures

Wash exposed skin thoroughly after handling.

7.2 Precautions for safe storage, including any incompatibilities

Storage conditions

Keep only in the original container in a cool, well ventilated place away from: incompatible materials. Keep container closed when not in use.

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

| Ionitra fertilizer | |
|--------------------|----------------|
| ACGIH | Not applicable |
| OSHA | Not applicable |

8.2 Exposure controls

Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment

Avoid all unnecessary exposure.

Hand protection

Wear protective gloves.

Eye protection

Chemical goggles or safety glasses.

Skin and body protection

Wear suitable protective clothing.

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 | Liquid |
| Color | No colorless |
| Odor | None. |
| Odor threshold | No data available |
| pH | No data available |
| pH solution | 6,5 |
| 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) | No data available |
| Vapor pressure | No data available |
| Relative vapor density at 20 C | No data available |
| Relative density | No data available |
| Solubility | Water: Solubility in water of component(s) of the mixture: • 100 % |
| Log Pow | No data available |
| Log Kow | No data available |
| Viscosity. kinematic | No data available |
| Viscosity. dynamic | No data available |
| Explosive properties | No applicable |
| Oxidizing properties, | No data available |
| Explosive limits | No data available |

9.1 Other information

SECTION 10 ; Stability and reactivity

10.1 Reactivity

No additional information available

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

No additional information available

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 toxically | Not classified |
| Skin corrosion / irritation | Causes skin irritation. |
| Serious eye damage / irritation | Causes serious eye irritation. |
| Respiratory or skin sensitization | Not classified |
| Germ cell mutagenicity | Not classified |
| Carcinogenicity | Based on available data, the classification criteria are not met. |
| Reproductive toxicity | Not classified |
| | Based on available data, the classification criteria are not met. |
| Specific target organ toxically (single exposure) | Not classified |
| Specific target organ toxically (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. |

SECTION 12 ; Ecological information

12.1 Toxicity

Potassium Nitrate (7757-79-1)

| | |
|---|---|
| LC50 fishes 1 | 162 mg/l (96 h; Pisces; Lethal) |
| LC50 other aquatic organisms 1 | 39 mg/l (96 h; Daphnia magna) |
| EC50 other aquatic organisms 1 | 200 - 1000 mg/l (Plankton; Motivity test) |
| LC50 fish 2 | 1378 mg/l (Poecilia reticulata) |
| LC50 other aquatic organisms 2 | 490 mg/l (48 h; Daphnia magna) |
| TLM fish 1 | 3000 mg/l (96 h; Lepomis macrochirus) |
| TLM fish 2 | 162 mg/l (96 h; Gambusia affinis) |
| Threshold limit other aquatic organisms 1 | 39 mg/l (96 h; Daphnia magna) |
| Threshold limit other aquatic organisms 2 | 490 mg/l (48 h; Daphnia magna) |

12.2 Persistence and degradability

Potassium Nitrate solution

| | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |
|-------------------------------|------------------|

Potassium Nitrate (7757-79-1)

| | |
|---------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |
| THOD | Not applicable |
| BOD (% of THOD) | Not applicable |

Water (7732-18-5)

Persistence and degradability Not established.

12.3 Bio accumulative potential

Potassium Nitrate Solution

Bio accumulative potential Not established

Potassium Nitrate (7757-79-1)

Bio accumulative potential No bio accumulation data available

Water (7732-18-5)

Bio accumulative potential Not established

12.4 Mobility in soil

No additional information available

12.5 Other adverse effects

Effect on ozone layer:

Effect on the global warming:

Other information:

No known ecological damage caused by this product.
Avoid release to the environment.

SECTION 13 ; Disposal considerations

Waste disposal recommendations:

Ecology - waste materials:

Dispose in a safe manner in accordance with local/national regulations.
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

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15 ; Regulatory information

15.1 US Federal regulations

Potassium and Nitrate ions solution

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 313 - Emission Reporting

1 % Nitrate compounds (water dissociable)

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US Federal regulations

CANADA

Potassium and Nitrate ions solution

WHMIS Classification

Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Potassium and Nitrate ions solution

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification

Class C - Oxidizing Material

Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification

Uncontrolled product according to WHMIS classification criteria

EU-Regulations

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

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

Not classified

15.3 National regulations

Potassium and Nitrate ions solution

Not listed on the Canadian IDL (Ingredient Disclosure List)

Water (7732-18-5)

Not listed on the Canadian IDL (Ingredient Disclosure List)

SECTION 16 ; Other information

Indication of changes:
Other information:

Revision - See: *.
None.

Full text of H-phrases: see section 16:

| | |
|--------------|---|
| Eye Irrit 2A | Serious eye damage/eye irritation, Category 2A |
| Ox. Sol. 3 | Oxidizing Solid's, Category 3 |
| Skin Irrit 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity - Single exposure, Category 3, Respiratory tract irritation |
| H272 | May intensify fire; oxidizer |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |

NFPA health hazard

NFPA fire hazard

NFPA reactivity

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

0 - Materials that will no burn.

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



HMIS 111 Rating

Health

Flammability

Physical

Personal Protection

1 Slight Hazard - Irritation or minor reversible injury possible

0 Minimal Hazard

0 Minimal Hazard

B

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