

Date: 2024.04.30

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

Trade name:

NPK 7-20-30+S;
NPK 7-20-28+S;
NPK 15-15-15+S;
NPK 5-15-30+S;
NPK 18-2-8+S;
NPK 19-4-6+S;
NPK 6-26-26;
NPK 10-26-26;
NPK 6-19-34+S;
NPK 12-24-12+S;

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Relevant identified uses: used Fertilizers production. Industrial. Agriculture.

Uses advised against: not available.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET Supplier

SIA „LVAGROO“
Tvaika street 15, Rīga, LV-1005
Latvia
+371 20413205
www.lvagro.lv

Electronic mail address of the person, responsible for the safety data sheet:

info@lvagro.lv

1.4. EMERGENCY TELEPHONE NUMBER

Poison Control Centre (Austria) Tel. No.: +43 1 406 4343

Antigif Centrum Centre Antipoisons (Belgium) Tel. No.: +32 070 245 045

National Toxicology Center, Hospital for Active Medical Treatment and Emergency Medicine “N.I.Pirogov”
(Bulgaria) Tel. No. / fax.: +359 2 9154 233

Poison Control Centre (Croatia) Tel. No.: +385 1 234 8342

Toxicological Information Centre (Czech Republic) Tel. No.: +420 224 919 293 / +420 224 915 402

Poison Control Hotline (Denmark) Tel. No.: +45 82 12 12 12

Poisoning Information Centre (Estonia) Tel. No.: +372 626 93 90

Poison Information Centre (Finland) Tel. No. : +358 09 471 977

ORFILA (INERIS) (France) Tel. No.: + 33 (0) 1 45 42 59 59

Health Toxicological Information Service (Hungary) Tel. No.: +36 80 20 11 99

Poison Centre (Iceland) Tel. No.: +354 543 2222

National Poisons Information Centre (Ireland) Tel. No. : + 353 (0)1 809 2566 / + 353 (0)1 837 9964

Valsts Toksikoloģijas centrs, Saindēšanās un zāļu informācijas centrs (Latvia) Tel. No.: +371 670 42473

Health Emergency Situations Centre of the Ministry of Health, Poison Information Bureau (Lithuania) Tel. No.: +370 5 236 20 52, mob.: +370 687 53378

Mater Dei Hospital (Malta) Tel. No.: +356 2545 0000

National Poisons Information Centre (NVIC) (Netherlands) Tel. No.: +31 (0) 30 274 8888

Mental Health Helpline (Norway) Tel. No. : +47 22 59 13 00

Instituto Nacional de Emergência Médica (Portugal) Tel. No. : + 351 213 303 271

Biroul RSI si Informare Toxicologica (Romania) Tel. No. : +40 021 318 3606

National Toxicological Information Centre (NTIC) (Slovakia) Tel. No. : +421 2 5477 4166

Toxicology Information Service (Spain) Tel. No.: + 34 91 562 04 20

Swedish Poisons Information Centre (Sweden) Tel. No.: +46 08 331231

Health and Safety Executive (HSE) (United Kingdom) Tel. No.: +44 0151 922 9235

2. HAZARDS IDENTIFICATION

2.1. Classification: According to provisions of Regulation (EC) No 1272/2008, considering the components and their amount, complex NPK fertilizers listed in the following SDS Section 1 of different brands (types) are not classified as hazardous materials (mixtures).

2.2. Label elements:

Hazard symbols and references: None.

Risk phrases: None.

Safety phrases:

S2 Keep out of reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S22 Do not breathe dust

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S46 If swallowed, seek medical advice immediately and show this container or label.

Label elements according to Regulation (EC) No 1272/2008 (from 2015):

Hazard pictograms, signal word: None.

Hazard statements: None.

Safety precautions:

P102 Keep out of reach of children.

P260 Do not breathe dust

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P401 Keep away from food, drink and animal feeding stuffs.

P301+P310 IF SWALLOWED: If you feel unwell, call POISON CONTROL AND INFORMATION CENTER or contact your doctor.

2.3. Other hazards:

PBT and vPvB assessment results: Are not attributed to PBT and vPvB.

Health hazards: Inhalation of dust may irritate airways, difficulty in breathing, can lead to coughing, headache.

Eye contact may cause irritation, mechanically damage them.

Contact with skin can cause irritation, cause redness and pain.

Ingestion may cause damage to digestive tract and cause nausea, vomiting, diarrhoea, poisoning, possible cardiac malfunctions.

Physical and chemical hazards: When heated at high temperatures, fission of components is possible, as well as emission of ammonia, sulphur, phosphorus, nitrogen oxides and other harmful gases.

Environmental hazards and potential damage outcomes: A large amount of fertilizer, having got into the open water pools, may cause long-term adverse effects in the ecosystem. Fertilizer dust pollutes the atmosphere.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Chemical characterization: Complex nitrogen (N-NH₄), phosphorus (P₂O₅) and potassium (K₂O) fertilizers. Mixtures of inorganic salts (ammonium sulphate, potassium chloride, ammonium phosphate, diammonium hydrophosphate, urea, etc.).

3.2. Mixtures

Ingredient	CAS Nr.	EC-No.	REACH reg. No	Weight, (%)
Ammonium sulphate	7783-20-2	231-984-1	01-2119455044- 46-0054	≤ 60
Potassium chloride	7447-40-7	231-211-8	N/A	≤ 60
Ammonium dihydrophosphate (MAP)	7722-76-1	231-764-5	01-2119488166- 29-0004	≤ 30
Diammonium hydrophosphate (DAP)	7783-28-0	231-987-8	01-2119490974- 22-0006	≤ 10
Urea CO(NH ₂) ₂	57-13-6	200-315-5	01-2119463277- 33-0000	≤ 8

4. FIRST AID MEASURES

4.1. Description of first aid measures

In case of inhalation: In case of inhalation of dust, get out in the fresh air. If breathing is difficult, seek medical advice. In case of inhalation of gas released during thermal decomposition, immediately call an ambulance.

In case of eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water for > 15 minutes holding eyelids apart (remove contact lenses, if present). Continue rinsing. If eye irritation persists, get medical advice/attention.

In case of skin contact: Remove contaminated clothing. Wash contaminated skin point with soap and water. If skin irritation occurs, get medical advice/attention

In case of ingestion: Rinse mouth with water. Drink 1-2 glasses of water. Seek medical attention immediately.

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

After inhalation of dust, shortness of breath and coughing are possible. If swallowed, mucous membrane of the digestive tract can be damaged, cause nausea, vomiting and diarrhoea. Irritated skin may become red. In case of ingestion of fertilizer or inhalation of gas of thermal destruction, poisoning symptoms can occur after several hours; therefore victim should be observed for at least 48 hours.

4.3. Indications of any immediate medical attention and special treatment needed: In case of ailment symptoms, seek medical attention immediately. If the injured person is unconscious, he cannot be given to drink or put something in his mouth.

5. FIRE FIGHTING MEASURES

5.1. Extinguishing Media:

Suitable extinguishing media: CO₂ foam, powder, finely sprayed water.

Unsuitable extinguishing media: N/A

5.2. Special hazards arising from the substance or mixture: The fire may result in occurrence of thermal destruction of fertilizer components, formation of harmful fumes, nitrogen oxides (NO, NO₂), carbon oxides (CO, CO₂), sulphur oxides, phosphorus oxides, chlorine, ammonia, hydrogen chloride, etc.

5.3 Advice for fire-fighters: Wear respiratory and eye protection, wear protective fire-fighter clothing. Move packages of fertilizer from the source of fire.

Do not allow fire-extinguishing agent to enter into open water pools.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1. Non-emergency personnel: Ensure adequate ventilation in work areas. Use personal protective equipment - protective clothing, gloves and respiratory protective masks. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust.

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6.1.2. Emergency personnel: Only the personnel liquidating accident consequences must remain in the area. Ensure adequate ventilation of the area. Use special clothing and equipment. Turn off electrical appliances.

6.2. Environmental precautions: Fertilizer should not enter surface or ground water, drinking water sources, as well as discharged into drains. In case of spill of large amounts, report the environmental services.

6.3. Methods and materials for containment and cleaning up Spilled fertilizer should be collected mechanically, if clean, poured into plastic containers, used for their intended purpose, contaminated amount should be poured into hazardous waste container. Avoid generation of dust. Flush residue with water.

6.4. Reference to other sections: Personal protective equipment-see Section 8. Waste management - see No. 13 of the SDS.

7. HANDLING AND STORAGE**7.1. Precautions for safe handling:**

Wear protective clothing, protective gloves and goggles, and respiratory protection equipment. Observe work safety and hygiene requirements.

Work in well ventilated areas. Avoid dust formation. Avoid breathing dust.

Avoid contact with eyes, skin and clothing. Do not swallow.

Wash your hands after work and before breaks. Do not eat, drink or smoke during work.

7.2. Conditions for safe storage, including any incompatibilities

Store in closed original containers; in well ventilated, cool and dry area. Can be stored temporarily (up to 6 months) outside under a shed.

Packaging must be sealed and mechanically durable, chemically resistant and labelled.

Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.

Do not store together with other materials, for example., acids, alkalis, reducing agents, combustible materials (oil products, grease).

Do not store near heat sources, open flames.

Large amounts can be stored in bulk in closed covered warehouses, protected from atmospheric precipitation and humidity.

7.3. Specific end use (s): Complex NPK fertilizers. Usage and other information are indicated on fertilizer label

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters:**

Marginal measures of fertilizer dangerous concentrations of harmful components and their long-term and short-term effect in working environment air according to HN 23:2011 are as follows: Component	CAS Nr.	Long-term effect marginal measure (IPRD, mg/m ³)	Short-term effect marginal measure (TPRD, mg/m ³)
Dust	–	10	–
- inhalable fraction		5	–
- alveolar fraction			
Ammophos (mixture of mono-and diamine phosphates)	299-86-5	6	–
Potassium chloride	7447-40-7	5	–
Potassium sulphate	7778-80-5	10	–
Urea (carbamide, urea)	57-13-6	10	–
Sodium chloride	7647-14-5	5	–
Sodium tetraborate pentahydrate (acc. to borax)	12179-04-3	2	–

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

a) **Form:** (2–5) mm diameter granules

b) **Colour:** gray, pink

c) **Odour:** odourless

d) **Hydrogen ion ratio (pH)**(1% t-lo), 20°C 5–7

e) **Melting point,** °C unspecified

f) **Boiling point,** °C not applicable

- g) Flash point °C: not applicable
 - h) Auto ignition temperature, °C: not self-igniting
 - i) Explosive limits: volume %: not explosive
 - k) Bulk density, kg/m³, 850–1150
 - l) Solubility in water soluble > 20 g/l, 20°C
 - m) Distribution coefficient (n-octanol/water): not applicable
 - n) Decomposition temperature, °C > 120
- 9.2. Other information n/a

10. STABILITY AND REACTIVITY

10.1. Reactivity: No data available.

10.2 Chemical stability: Material is stable, using under its intended purpose and observing the rules of storage and safety requirements.

10.3. Possibility of hazardous reactions: No data available.

10.4 Conditions to avoid: Humidity. High ambient temperature.

10.5. Incompatible materials Alkalies, acids, reducing agents and combustible materials.

10.6. Hazardous decomposition products: Nitrogen oxides, ammonia, sulphur oxides, phosphorus oxides, etc

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

11.1.1. Substances:

a) Acute toxicity:

Ammonium sulphate, CAS. 7783-20-2:

LD50 oral, rat: (2410-4540) m/kg; mouse (610-4280) mg/kg

LD50 dermal, rabbit: > 5000 mg/kg

LC50 inhalation, rat: No data

Ammonium phosphate (MAP), CAS NR.7722-76-1:

LD50 oral, rat: 2000 m/kg

LD50 dermal, rabbit: > 5000 mg/kg

LC50 inhalation, rat: > 5000 mg/m³

Diammonium phosphate (DAP), CAS. 7783-28-0:

LD50 oral, rat: 2000 m/kg

LD50 dermal, rabbit: > 5000 mg/kg

LC50 inhalation, rat: > 5000 mg/m³

Preparation:

b) skin corrosion and (or) irritation: Prolonged exposure may cause skin irritation.

c) serious eye damage and (or) eye irritation: Long-term effect of dust may irritate the eyes.

d) Respiratory or skin sensitisation: Dust may cause respiratory tract irritation.

e) Germ cell mutagenicity: No data available.

f) Carcinogenicity: No data available.

g) Reproductive toxicity: No data available.

11.1.2. Other information: When ingested may cause damage to gastrointestinal tract

12. ECOLOGICAL INFORMATION

12.1. Toxicity of Components:

Ammonium sulphate, CAS No 7783-20-2:

LC50 fish (Leuciscus idus) 460-1000 mg/l/96 h;

LC50 fish (Cyprinus carpio) 23-141 mg/l/96 h

LC50 fish (Pimephales promelas) > 100 mg/l/96 h

LC50 fish (Alburnus alburnus) 310 mg/l/96 h

Fish LC50 (Oncorhynchus mykiss) 53 mg/l;

EC50 invertebrates (Daphnia magna) 169 mg/l; 433 mg/l/48 h;

EC50 Algae 2700 mg/l (18 days)

Ammonium phosphate (MAP), CAS No 7722-76-1:

LC50 fish (Oncorhynchus mykiss) > 85.9 m/l;

EC50 invertebrates (Daphnia magna) 1790 mg/l

EC50 algae (Pseudokirchnerella subcapitata) > 100 mg/l

Diammonium phosphate (DAP), CAS No 7783-28-0:

LC50 fish (Cirrhinus mrigola I-Rohit) 1700 mg/l;

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EC50 invertebrates (Daphnia magna) 1790 mg/l

EC50 algae > 100 mg/l

Potassium chloride CAS No 7447-40-7:

LC50 fish (Lepomis macrochirus) 2010 mg/l;

EC50 invertebrates (Daphnia magna) 825 mg/l

EC50 algae (Selenastrum capricornutum) 2500 mg/l

12.2. Persistence and degradability The mixture consists of inorganic salts, test is not performed.

12.3. Bioaccumulative potential Fertilizer components are absorbed by plants. Large amounts stimulate the growth of water flora.

12.4. Mobility in soil Soluble in water, easily distributed in the soil.

12.5. Results of PBT and vPvB assessment: According to EU criteria is not classified as PBT or vPvB.

12.6. Other adverse effect: Pursuant to the environmental principles, prevent the fertilizers from entering into open water pools.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods: Contaminated fertilizers and packaging materials must be poured into the waste container. Waste Code: 02 01 08 (agrochemical waste, other than those mentioned on 02/01/08); 06 03 14 (solid salts and solutions, other than those mentioned on 06/03/11 and 06/03/13).

13.2. Uncleaned packaging treatment: Packaging with product residue is utilized together with its waste. Packaging Waste Code: 15 01 02 (plastic packaging); 15 01 10 (packaging containing residues of hazardous substances or contaminated)

14. TRANSPORT INFORMATION

Complex NPK fertilizers are not attributed to the category of transportation of hazardous materials, and they are not subject to the European Agreement on the International Carriage of Dangerous Goods by road (ADR/RID), sea transport (IMDG/GGVS), air transport (CAO/IATA) requirements.

14.1. UN Number: Not applicable.

14.2. UN proper shipping name: –

14.3. Transport hazard class(es): Not applicable.

14.4. Packing group: Not applicable.

14.5. Environmental hazards Not applicable.

14.6. Special precautions for user Not applicable.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);
- Commission Regulation (EU) No 453/2010 partially amending Regulation (REACH)
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council (CLP regulation).
- “Relating to the procedures of classification and labelling of hazardous substances and preparations” (with all amendments) approved by the Order No 411/V-460 of 27 June 2002 and Order No 345/313 of 4 August 2003 of the Minister of Environment and Minister of Health of the Republic of Lithuania;
- Lithuanian Hygiene Standard HN 23-2011 on “Marginal measures of chemical substances. General requirements for measurement and impact assessment”;
- The rules on labelling of objects (goods) and indication of prices approved by the Order No 170 of 12 May 2002 and Order No 4-134 (new version) of 27 April 2002 by the Minister of Economy of the Republic of Lithuania;
- “Rules on Waste Management” approved by the Order No 217 of 17 July 1999 of the Minister of Environment of the Republic of Lithuania (new version of 30 December 2003 by Order No 722);
- “Procedures related to requirements and packaging of dangerous chemicals and preparations” approved by the Order No 599 of 19 November 2002 of the Minister of Environment of the Republic of Lithuania;
- European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).
- Regulation (EC) No 2003/2003 of the European Parliament and of the Council relating to fertilisers.

15.2. Chemical safety assessment: -

16. OTHER INFORMATION

R36 Irritating to eyes; R22 Harmful if swallowed; R36 Irritating to eyes; R41 Risk of serious damage to eyes
Repr. Cat 2, R60 Harmful to fertility; R61 May cause harm to the unborn child

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R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic ecosystem environment

GHS08 GHS07 GHS09

H302 Harmful if swallowed; H318 Causes severe eye damage; H319 Causes severe eye irritation

H360FD May damage fertility or the unborn child

H410 Very toxic to aquatic organisms, may cause long-term changes

The data provided in this safety data sheet must be made available to everyone concerned and who works with the chemical substance (mixture). Data reflects today's level of knowledge, national and EU laws. The above information indicates what health protection, safety and environmental standards are to be observed, and what preventive measures are to be applied to decrease risks or prevent them during the storage and use of this product, but does not to reveal any other, specific properties of chemical substance (mixture).

Additional information is provided by **SIA "LVAGROO"**. www.lvagro.lv

This Safety Data Sheet has been prepared by producer.