SAFETY DATA SHEET

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

1.1. PRODUCT IDENTIFIER
Product name: NPK complex fertilizers
Mixture a unique formula identifier (UFI): –.

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST
Relevant identified uses: Agriculture.
Uses advised against: not available.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET
Manufacturer:
JBC „Granmax"
Nevezio str. 5, LT-93263 Klaipeda
Tel: +370 46 460791
Fax: +370 46 460790

LIETUVOS RESPUBLIKA Uždaroji akcinė bendrovė „Granmax" Joint Stock Company SERTIFIKATAMS REPUBLIC OF LITHUANIA

UAB „GRANMAX" į/k 300015304
PVM kodas LT100006862511
Nevėžio g. 5, LT-93263, Klaipėda
Lietuva, tel.: +370 46 460791
info@granmax.lt

Electronic mail address of the person, responsible for the safety data sheet:
E-mail: info@granmax.lt

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

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

Section 2. HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP]
Eye Dam. 1; H318.

2.1.2. Additional information
For full text of Hazard- and EU Hazard-statements, see in section 16.

2.2. LABEL ELEMENTS

2.2.1. Label according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictogram

GHS05
Signal word
Danger

Hazard statements
H318 Causes serious eye damage.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard information (EU): None.

2.2. OTHER HAZARDS
Handling and/or processing of this material may generate a dust, which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. COMPOSITION INFORMATION ON INGRIDIENTS

3.1. SUBSTANCES
Not applicable.

3.2. MIXTURES

Substance	CAS No.	EC No.	Classification according EC No. 1272/2008	Concentration
Calcium bis(dihydrogenorthophosphate); REACH reg. No.: 01-2119490065-39-xxxx	7758-23-8	231-837-1	Eye Dam. 1; H318	10-35%
Potassium chloride; REACH reg. No.: –	7447-40-7	231-211-8	Not classified.	9-58%
Ammonium dihydrogenorthophosphate; REACH reg. No.: –	7722-76-1	231-764-5	Not classified.	16-25%
Diammonium hydrogenorthophosphate; REACH reg. No.: 01-2119490974-22-xxxx	7783-28-0	231-987-8	Not classified.	0,5-26%
Potassium sulphate; REACH reg. No.: 01-2119532646-36-xxxx	7778-80-5	231-915-5	Not classified.	5-20%
Ammonium sulphate; REACH reg. No.: 01-2119455044-46-xxxx	7783-20-2	231-984-1	Not classified.	5-19%
Calcium sulphate; REACH reg. No.: –	7778-18-9	231-900-3	Not classified.	3-18%
Urea; REACH reg. No.: 01-2119463277-33-xxxx	57-13-6	200-315-5	Not classified.	10-14%

Additional information: For full text of H-statements: see section 16.

Section 4. FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES
General information. Remove contaminated clothing.
Following inhalation. After inhalation of dust: Fresh air. If difficulties occur: Seek medical attention.
Following. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Following eye contact. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Following ingestion. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Self-protection of the first aider. Take care of your safety!

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treatment: No specific treatment. In case an intoxication is suspected, National Poisons Information Centre should be addressed immediately, number of Emergency telephone see in section 1.4.

Section 5. FIREFIGHTING MEASURES

General fire hazards. Clear fire area of all non-emergency personnel. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media. Use extinguishing media suitable for surrounding materials. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media. None.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazardous combustion products: Fine dust clouds may form explosive mixtures with air. At temperatures of 235 °C can be emited: ammonia. Decomposition products may include the following materials: nitrogen oxides, sulphur oxides, ammonia, amines and etc.

5.3. ADVICE FOR FIREFIGHTERS

Special protective equipment for fire-fighters. In case of fire, wear self-contained breathing apparatus and wear protective clothing firefighters ensuring basic level of protection for chemical incidents.
Special fire-fighting procedures. Use water mist. Cool containers flooding sufficient amount of water and fire extinction. To prevent the mixture from entering the drainage system, sewage system, surface waters.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1. For non-emergency personnel. Put on appropriate personal protective equipment. Avoid breathing dust. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. No flares, smoking or flames in hazard area. For personal protection, see Section 8.
6.1.2. For emergency responders. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". Use personal protection recommended in Section 8 of the SDS.

6.2. ENVIRONMENTAL PRECAUTIONS

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

6.3.1. For containment: Avoid creating dusty conditions and prevent wind dispersal.
6.3.2. For cleaning up: Vacuum or sweep up and place into approved containers for later disposal.
6.3.3. Other information: Dispose of via a licensed waste disposal contractor.

6.4. REFERENCE TO OTHER SECTIONS

For personal protection, see Section 8. For waste disposal, see section 13.

Section 7. HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Advice on safe handling. Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage requirements. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Protect from moisture. May react in the presence of moisture. Packaging materials: Suitable: Stainless steel. Synthetic (Polypropylene). Incompatible products: Strong reducing agents, strong acids, finely powdered metals, organic matter, chlorides (chlorates), combustible materials.

7.3. SPECIFIC END USE(S)

Not available.

Section 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

8.1.1. Occupational exposure limits.

Limit values for harmful and dangerous concentrations of substances and their long-term and short-term effects in the air of the working environment (Lithuania):

Substance		Limit value							Notes
		Limit value - Long term (IPRD)		Limit value - Short term (TPRD)		Not to be exceeded Limit value (NRD)		Impact health features markers	
Name	CAS No.	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
Dust: - inspired fraction	–	10	-	-	-	-	-	-	If there are organic and inorganic dust mixtures, organic fraction may not exceed 5 mg / m³. If any material dust the separate LV for it is he.
- alveolar fraction	–	5	-	-	-	-	-	-	Alveolar fraction – it is part of the dust, spilling over preseparator whose parameters meet the Johannesburg Convention parameters.
Potassium chloride	7447-40-7	5	-	-	-	-	-	-	-
Potassium sulphate	7778-80-5	10	-	-	-	-	-	-	-
Urea	57-13-6	10	-	-	-	-	-	-	-

DNEL				
Substance	**Population**	**Exposure**	**Value**	**Form**
Ammonium sulphate, CAS No.	Workers	Long term Dermal,	11.167 mg/m³	–

	Consumers	Long term Dermal Long term Inhalation Long term Oral	12.8 mg/kg bw/day 1.667 mg/m³ 6.4 mg/kg bw/day	
Calcium bis(dihydrogenorthophosphate), CAS No. 7758-23-8	Workers	Long term Inhalation	4.07 mg/m³	–
	Consumers	Long term Inhalation	3.04 mg/m³	–

8.1.2. Biological limit values.

PNEC related information			
Substance	**Compartment Detail**	**Value**	**Method Detail**
Ammonium sulphate, CAS No. 7783-20-2	Fresh water	0.312 mg/l	Assessment Factors

Recommended monitoring procedures. Follow standard monitoring procedures.

8.2. EXPOSURE CONTROLS
General Information: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Use sealed systems as far as possible.
8.2.1. Appropriate engineering controls. The usual precautions for the handling of chemicals must be observed. Before direct contact with the mixture use personal protection equipment. Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
8.2.2. Personal protection equipment
General information. Use personal protective equipment as required. Keep working clothes separately. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection. Safety glasses with side shields, suitable protective equipment (EN 166).
Skin protection:
Hand protection. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. 4 - 8 hours (breakthrough time): butyl rubber, PVC, nitrile (EN 374).
Other skin protection. Wear protective work clothing.
Respiratory protection. Wear dust protection mask, suitable protective equipment (EN 149).
Thermal hazards. Not applicable.
Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

8.3. ENVIRONMENTAL EXPOSURE CONTROLS
Contain spills and prevent releases, and observe national regulations on emissions.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	solid (granules)
COLOUR:	from pale gray to pink
ODOUR:	weak ammonia
MELTING POINT / FREEZING POINT:	> 150 °C begins urea decomposition

FLAMMABILITY (SOLID, LIQUID, GAS):	not combustible
FLASH POINT:	not applicable
AUTO-IGNITION TEMPERATURE:	not applicable
DECOMPOSITION TEMPERATURE:	not available
pH:	4.5-6.5 (depending on the brand of fertilizer)
KINEMATIC VISCOSITY:	not applicable
SOLUBILITY:	no date available
PARTITION COEFFICIENT (N-OCTANOL/WATER):	not applicable
VAPOUR PRESSURE:	not applicable
DENSITY AND/OR RELATIVE DENSITY:	not available
RELATIVE VAPOUR DENSITY:	not applicable
EXPLOSIVE PROPERTIES:	not explosive. There are no chemical groups associated with explosive properties present in the molecule.
BULK DENSITY:	0.9-1.1 g/cm^3
OXIDISING PROPERTIES:	none
PARTICLE CHARACTERISTICS:	not available

9.2. OTHER INFORMATION

9.2.1. Information with regard to physical hazard classes
No date available.
9.2.2. Other safety characteristics
Dust in air can form explosive mixtures.

Section 10. STABILITY AND REACTIVITY

10.1. REACTIVITY
No specific test data related to reactivity available for this product or its ingredients.

10.2. CHEMICAL STABILITY
Stable under recommended storage and handling conditions (see section 7).

10.3. POSSIBILITY OF HAZARDOUS REACTIONS
No hazardous reaction when handled and stored according to these provisions (see section 7).

10.4. CONDITIONS TO AVOID
Excess moisture and heat, aerosols and dust generation.

10.5. INCOMPATIBLE MATERIALS
Oxidizing substances and bases. Alkali metals, chlorates, nitrites (potassium chlorate, potassium nitrite, potassium nitrate, ammonium nitrate).

10.6. HAZARDOUS DECOMPOSITION PRODUCTS
Under normal conditions of storage and use, hazardous decomposition products should not be produced. However, oxides of sulphur, nitrogen oxides (NOx) and ammonia (NH3) can be emitted and etc.

Section 11. TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) No. 1272/2008
Acute toxicity. No information available for the product.

Acute toxicity of components:
Calcium bis(dihydrogenorthophosphate); CAS No. 7758-23-8:
Acute Oral Toxicity: LD50 >5000 mg/kg (Rat Sprague-Dawley)
Acute Dermal Toxicity: LD50 >2000 mg/kg (Rabbit Stauffland albino)
Acute Inhalation Toxicity: LC50 >2.6 mg/l/4h. (Rat Wistar) (air)

Respiratory or skin sensitisation. Not classified.
Germ cell mutagenicity. Not classified.
Carcinogenicity. Not classified.
Reproductive toxicity. Not classified.
STOT-single exposure. Not classified.
STOT-repeated exposure. Not classified.
Aspiration hazard. Not applicable.

11.2. INFORMATION ON OTHER HAZARDS
11.2.1. Endocrine disrupting properties
None.
11.2.2. Other information
Not available.

Section 12: ECOLOGICAL INFORMATION

12.1. TOXICITY
The product is not classified as dangerous for the environment.

12.2. PERSISTENCE AND DEGRADABILITY
Abiotic degradation.

12.3. BIOACCUMULATIVE POTENTIAL
Unlikely to bioaccumulation.

12.4. MOBILITY IN SOIL
Not available.

12.5. RESULTS OF PBT AND vPvB ASSESSMENT
Not a PBT or vPvB substance or mixture.

12.6. OTHER ADVERSE EFFECTS
No known significant effects or critical hazards.

Section 13. DISPOSAL CONSIDERATION

13.1. WASTE TREATMENT METHODS

Residual waste. 06 03 14 - solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13.
Contaminated packaging. Dispose of as unused product.
Disposal methods/information. Dispose in accordance with all applicable regulations.

Section 14. TRANSPORT INFORMATION

Transport only in accordance with ADR for road haulage, RID for rail transportation, ADNR/IMDG for carriage by vessel/sea and IATA for carriage by air.

14.1. UN number or ID number. None.
14.2. UN proper shipping name. None.
14.3. Transport hazard class (es). None.
14.4. Packing group. None.
14.5. Environmental hazards. No.
14.6. Special precautions for user. Before use read the safety instructions in the safety data sheet and emergency procedures.
14.7. Maritime transport in bulk according to IMO instruments. Not applicable.

Section 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 of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No.793/93, Commission Regulation (EC) No. 1488/94, Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Official Journal of the European Union No. L 396, 30-12-2006, error correction – No. L 136/3, 2007-5-29);
– COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ L 203, 26.6.2020, p. 28–58);
– On 16 December 2008 the Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of chemical substances and mixtures was undersigned. The said Regulation amended and repealed the directives 67/548/EEC and 1999/45/EC and Regulation (EC) No. 1907/2006 (the REACH Regulation). The Regulation has been published in the Official Journal of the European Union No. L353, volume 51 on 31 December, 2008;
– COMMISSION REGULATION (EU) 2016/918 of 19 May 2016 amending for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (OJ L 156, 14.6.2016, p. 1–102);
– The European Agreement concerning International Carriage of Dangerous Goods by Road (ADR).

15.2. CHEMICAL SAFETY ASSESSMENT

For this product a chemical safety assessment has not been carried out.

Section 16. OTHER INFORMATION

16.1. INDICATION OF CHANGES

Information contained in the Regulation 1907/2006/EC with the Regulation 2020/878.
Indication of changes: All SDS.
Date of filling: 26-06-2015
Revision: 12-01-2021
Version No.: 3

16.2. FULL TEXT OF HAZARD AND PRECAUTIONARY STATEMENTS

H318 – Causes serious eye damage.

P280 Wear protective gloves/ protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard information (EU): None.

Abbreviations:
Eye Dam. 1 – Serious eye damage/eye irritation; Category 1.

Acronyms:
ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID – Regulations concerning the International Carriage of Dangerous Goods by Rail.
IMDG – International Maritime Dangerous Goods.
IATA – International Air Transport Association.
IMO – International Maritime Organization.
vPvB – Very Persistent and Very Bioaccumulative.
PBT – Persistent, Bioaccumulative and Toxic substance.

EC50 – Effective concentration to 50% of a test population (Half maximal effective concentration).
IC50 – Inhibitory concentration to 50% of a test population (Half maximal inhibitory concentration).
CAS – Chemical Abstracts Service number.
CEN – European Committee for Standardisation.
STOT – Specific Target Organ Toxicity.
PNEC(s) – Predicted No Effect Concentration(s).
ACGIH – Association advancing occupational and environmental health.
NIOSH – National Institute of Occupational Safety and Health.
NOEC – No effect concentration.
SDS – Safety Data Sheet.

KEY LITERATURE REFERENCES AND SOURCES FOR DATA:

- The data provided by the European Chemicals Bureau (ECB), European Chemicals Agency (ECHA), Swedish Chemicals Agency (KEMI), International Laboratories Organization (ILO), the TOXNET Internet pages.

Disclaimer

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