



Material Safety Data Sheet

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Based on: Commission Directive no. 2001/58/EC Regulation (EC) no. 2003/2003 of European Parliament and of Council Regulation (EC) no. 885/2004 (adoption for new EU members)		

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

1.1 Identification of the Product

Designation	NPK Fertilizer
Trade name	GROGREEN NPK 10-5-40 + 2 MgO + ME
CAS Number	Preparation - therefore not relevant
EINECS Name/Number	Preparation - therefore not relevant
IUPAC Name	Preparation - therefore not relevant
Molecular formula	Preparation - therefore not relevant

1.2 Application of the Product

Primary use	Water soluble NPK fertilizer for fertigation and foliar application
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1.3 Company

Produced by:

LIMA EUROPE NV
Doelhaagstraat 77/1
B-2840 Rumst – Belgium

Telephone N°: +32-3-844-73-70
Fax N°: +32-3-888-14-82

1.4 Emergency calls

LIMA EUROPE NV Health Emergencies	+32-3-844-73-70 Contact your local Poison Center
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Mixture.

There are no ingredients present, which, within current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in section 8.

3. HAZARDS IDENTIFICATION

3.1 Classification

Classification according to Regulation (EC) NO 1272/2008 [CLP/GHS]

Classification: Ox. Sol. 3, H272

Classification according to directive 1999/45/EC (DPD)

Classification: 0, R8
See section 16 for full text of the R phrases or H statements declared above
See section 11 for more detailed information on health effects and symptoms

Label elements:

Hazard pictograms:





Signal word:	Warning
Hazard statements:	May intensify fire, oxidizer
Precautionary statements:	Keep away from heat, sparks, open flames and hot surfaces. No smoking. Store away from combustible materials and chemicals.
Response:	In case of fire: use flooding quantities of water for extinction
Supplementary label elements:	NA
Special packaging requirements:	NA
Other hazards:	NA

3.2 Human health

The product is basically harmless when handled correctly. However, the following points should be noted.

<i>Skin Contact:</i>	Prolonged contact may cause some irritation.
<i>Eye Contact:</i>	May cause irritation following contact.
<i>Ingestion:</i>	Small quantities are unlikely to cause toxic effect. Large quantities may give rise to gastro-intestinal disorders in extreme cases (particularly in children) formation of methaemoglobin ('Blue baby' syndrome) and cyanosis (indicated by blueness around the mouth) may occur.
<i>Inhalation:</i>	High dust concentrations of air-borne material may cause irritation of the nose and upper respiratory tract with symptoms such as sore throat and coughing.
<i>Long term effects:</i>	No adverse effects are known.
<i>Fire and thermal</i>	Molten material will cause burns and inhalation of decomposition gases can cause
<i>decomposition products:</i>	Irritation and corrosive effects on the respiratory system. Some lung effects may be delayed.

3.3 Environment

As this fertilizer contains nitrate and phosphate, heavy spillage may cause adverse environmental impact such as eutrophication in confined surface waters or nitrate contamination of ground or surface water. (See Section 12).

3.4 Other

Fire, heating and detonation:

- The fertilizers are not themselves combustible but, they can support combustion even in the absence of air. When strongly heated, they melt and decompose.
- Heating of fertilizers under strong confinement (e.g. in tubes or drains) may lead to a violent reaction or explosion especially if there is contamination by some of the substances mentioned in 10.3.
- On decomposition, water vapor and toxic gases such as nitrogen oxides and ammonia may be given off.

4. FIRST AID MEASURES

4.1 Product

<i>Skin Contact:</i>	Wash the affected area with soap and water. Get medical aid if irritation persists or develops.
<i>Eye Contact:</i>	Flush/irrigate eye, including under the lids, with copious amounts of water for at least 10 minutes. Obtain medical attention if eyes irritation persists.
<i>Ingestion:</i>	Do not induce vomiting. Give water or milk to drink.



Inhalation: Obtain medical attention if more than a small quantity has been swallowed.
Remove victim to fresh air immediately. Keep warm and at rest.
Obtain medical attention if ill effects occur.

4.2 Fire and decomposition products

Skin Contact: Wash areas in contact with molten material copiously with cold water.
Obtain medical attention.

Inhalation: Remove from the source of exposure to fumes.
Keep warm and at rest.
Give oxygen, especially if the person is blue in the face.
Artificial respiration should only be applied if breathing fails.

4.3 Most important symptoms and effect, both acute and delayed

Potential acute health effects

Skin Contact: No known significant effects or critical hazards.
Eye Contact: No known significant effects or critical hazards.
Ingestion: No known significant effects or critical hazards.
Inhalation: Exposure to decomposition products may cause a health hazard.

Over-exposure signs/symptoms

No specific data.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance.

Specific treatments: No specific treatment.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use flooding quantities of water for extinction. Do not use chemical extinguisher or foam or attempt to smother the fire with steam or sand.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance:

Oxidizing material. May intensify fire. The product itself is not combustible but it can support combustion, even in absence of air. On heating it melts and further heating can cause decomposition, releasing toxic fumes containing nitrogen oxides. It has high resistance to detonation. Heating under strong confinement can lead to explosive behavior.

Decomposition products:

Decomposition may include sulfur oxides and metal oxides. Avoid breathing dusts, vapors or fumes from burning materials. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

5.3 Advice for firefighters

Special precautions:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protection:

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to the European standard EN 469 will provide basic level of protection for chemical incidents.



6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Non-emergency personnel:

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 spilled material. Shut off all ignition sources. No flare, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put in appropriate personal protective equipment.

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 "non-emergency personnel".

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Small spill:

Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Use spark proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill:

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements of confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Use spark proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from clothing, incompatible materials and combustible materials. Keep away from heat. Empty containers retain product residue and can be hazardous. Do not reuse container. Products forms slippery surface when combined with water.

Occupational hygiene:

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

Recommendations:

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. Separate from reducing agents and combustible materials. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. Keep away from: organic materials, oil and grease.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Recommended monitoring:

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory equipment.

Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8.2 Exposure controls

Appropriate engineering:

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

8.3 Individual protection measures

Hygiene measures:

A washing facility or water for eye and skin cleaning purposes should be present.

Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicated this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

8.4 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.

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

Other skin protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection:

Use a properly fitted, air-supplying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure:

Emissions from ventilation or work process equipment.

Controls:

Should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information on basis physical and chemical properties

Appearance:

Physical state:	solid
Color:	Not determined.
Odor:	Not determined.
Odor threshold:	Not determined.
pH:	Not determined.
Melting point/freezing point:	Not determined.
Initial boiling point and boiling range:	Not determined.
Flash point:	Not determined.
Evaporation rate:	Not determined.
Flammability:	Non-flammable.
Burning time:	Not determined.
Burning rate:	Not determined.
Upper/lower flammability or explosive limits:	Lower: Not determined. Upper: Not determined.
Vapor pressure:	Not determined.
Vapor density:	Not determined.
Relative density:	Not determined.
Partition coefficient: n-octanol/water:	Not determined.
Auto-ignition temperature:	Not determined.
Viscosity:	Dynamic: Not determined. Kinematic: Not determined.
Explosive properties:	Non-explosive.
Oxidizing properties:	Oxidizer.

10. STABILITY AND REACTIVITY

Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability:	The product is stable.
Hazardous reactions:	Hazardous reactions or instability may occur under certain conditions of storage and use. Conditions: contact with combustible materials. Reactions: risk of causing or intensifying fire.
Conditions to avoid:	No specific data.
Incompatible materials:	Reactive or incompatible with following materials: alkalis, combustible materials, reducing materials, organic materials and acids.
Decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Conclusion/summary:	No significant effects or critical hazards are known. Potential acute health effects may occur after inhalation of decomposition products. Serious effects may be delayed following exposure.
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12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Conclusion/summary: No known significant effects or critical hazards.

12.2 Persistence/Degradability

Conclusion/summary: No known significant effects or critical hazards.

12.3 Mobility in soil

No data available.

12.4 PBT and vPvB assessment

Not applicable.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:

Methods of disposal:

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Hazardous waste:

The classification of the product may meet the criteria for a hazardous waste.

Packaging:

Methods of disposal:


The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Empty the bag by shaking to remove as much as possible of its contents. Empty bags may be disposed of as non-hazardous material or returned for recycling.


Special precautions:


This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.




14. TRANSPORT INFORMATION

14.1 Regulation: ADR/RID	
UN number	1479
UN proper shipping name	OXIDIZING SOLID, N.O.S. (Potassium nitrate,)
Transport hazard class(es)	5.1 
Packing group	III
Environmental hazards	No.
Additional information	: ADR/RID
<u>Hazard identification number</u>	: 50
<u>Limited quantity</u>	: LQ12
<u>Special provisions</u>	: 274
<u>Tunnel code</u>	: (E)

14.2 Regulation: ADN	
UN number	1479
UN proper shipping name	OXIDIZING SOLID, N.O.S. (Potassium nitrate,)
Transport hazard class(es)	5.1 
Packing group	III
Environmental hazards	No.
Additional information	: ADN
<u>Marine pollutant</u>	: No.

14.3 Regulation: IMDG	
UN number	1479
UN proper shipping name	OXIDIZING SOLID, N.O.S. (Potassium nitrate,)
Transport hazard class(es)	5.1 
Packing group	III
Environmental hazards	No.
Additional information	: IMDG
<u>Marine pollutant</u>	: No.
<u>Special precautions for user</u>	: Not applicable.
<u>Emergency schedules (EmS)</u>	: F-A, S-Q



14.4 Regulation: IATA	
UN number	1479
UN proper shipping name	Oxidizing solid, n.o.s. (Potassium nitrate,)
Transport hazard class(es)	5.1 
Packing group	III
Environmental hazards	No.
Additional information	: IATA
Marine pollutant	: No.
Special precautions for user	: Not applicable.
Passenger and Cargo Aircraft	
Quantity limitation	: 25.00 KG
Packaging instructions	: 559
Cargo Aircraft	
Quantity limitation	: 100.00 KG
Packaging instructions	: 563

14.5 Transport in bulk according to Annex II or MARPOL 73/78 and the IBC Code

Not applicable.

14.6 IMSBC

Proper shipping name: OXIDIZING SOLID, N.O.S. UN1479

Class: Class 5.1: Oxidizing material.

Group: B

15. REGULATORY INFORMATION

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

Annex XVII – restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable.

15.2 Other EU regulations:

Europe inventory: Not determined.

IPPC – Air: Not listed.

IPPC – Water: Not listed.

Hazardous incident:
ordinance remark: Not applicable.

15.3 National regulations:

D.Lgs. 152/06: Not classified.



Regulation (EU) 2003/2003:
D.Lgs. 217/2006

Regulation (EU) 2003/2003, D.Lgs. 217/2006.

Notes:

To our knowledge no other country or state specific regulations are applicable

Chemical Safety Assessment:
still required.

This product contains substances for which Chemical Safety Assessments are

16. OTHER INFORMATION

16.1 Abbreviations and acronyms

ATE = Acute Toxicity Estimate
 CLP = Classification, Labeling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 Bw = body weight

16.2 Key literature references and sources of data

EU REACH IUCLID5 CSR
 Regulation (EC) No. 1272/2008 Annex VI
 National institute of Occupational Safety and Health, U.S.
 Dept. of Health, Education and Welfare
 Reports and Memoranda Registry of Toxic Effects of Chemical Substances
 Atrion International Inc. 4777 Levy Street, St. Laurent, Quebec HAR 2P9, Canada

16.3 Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Ox. Sol. 3, H272	Expert judgment

Full text of abbreviated H: Statements	H272	May intensify fire; oxidizer.
Full text of classifications: [CLP/GHS]	Ox. Sol.3	OXIDIZING SOLIDS Category 3.
Full text of abbreviated R: Phrases	R8	Contact with combustible material may cause fire.
Full text of classifications: [DSD/DPD]	O	Oxidizing
Date of printing:		18/11/2014
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Prepared by:		Lima-europe nv.

The information in this safety data sheet is given in good faith and belief in its accuracy based on our knowledge of the substance/preparation concerned at the date of publication. It does not imply the acceptance of any legal liability or responsibility whatsoever by the Company for the consequences of its use or misuse in any particular circumstances.

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