



# SAFETY DATA SHEET

Nutrichem 12-3-33

## 1. Identification of the substance/preparation and of the company/undertaking

### Identification of the substance or preparation

**Product name** : Nutrichem 12-3-33

**Use of the substance/preparation** : Fertiliser.

### Company/undertaking identification

**Manufacturer / Supplier** NU3 N.V. - Grobbendonk  
 Industrieweg 20  
 B-2280 Grobbendonk  
 Belgium  
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 NSW 2060 Australia

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yaraasiapacific@yara.com

**Emergency telephone number** +32 (0) 14 50 70 93 (8.00 - 17.00 Office hours)  
 +32 (0) 70 245 245 (Belgium Anti-poison Centre, 24h, 7d)

+61 4 1722 3075 (24h)

## 2. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : O; R8

**Physical/chemical hazards** : Contact with combustible material may cause fire.

See section 11 for more detailed information on health effects and symptoms.

## 3. Composition/information on ingredients

**Substance/preparation** : Preparation

Ingredient name	CAS number	%	EC number	Classification
Potassium nitrate	7757-79-1	76.2	231-818-8	O; R8
<b>See section 16 for the full text of the R-phrases declared above</b>				

There are no ingredients or additional ingredients present which, within the 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.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in section 8.

Contains some or all of the following in addition to potassium nitrate:- mono and di ammonium phosphate, potassium sulphate, potassium phosphate, ammonium sulphate, urea, secondary nutrients and micro nutrients.

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Page: 1/6

## 4. First-aid measures

- Inhalation** : Avoid breathing dust. If inhaled, remove to fresh air.
- Ingestion** : If large quantities of this material are swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- Skin Contact** : Avoid prolonged or repeated contact with skin. After handling, always wash hands thoroughly with soap and water. Get medical attention if irritation develops.
- Eye contact** : In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

- Extinguishing media** : Use water only in flooding quantities. Do NOT use chemical extinguisher or foam or attempt to smother the fire with steam or sand.
- Special exposure hazards** : Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Hazardous thermal decomposition products** : These products are  
carbon oxides  
nitrogen oxides  
sulfur oxides  
phosphorus oxides  
metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Remark** : 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 and ammonia. It has high resistance to detonation. Heating under strong confinement can lead to explosive behaviour.

## 6. Accidental release measures

- Personal precautions** : If released in large quantities: Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5). Do not touch or walk through spilt material.
- Environmental precautions and clean-up methods** : Avoid contact of spilt material and runoff with soil and surface waterways.
- Environmental precautions and clean-up methods** : Avoid contact of spilt materials and runoff with soil and surface waterways.
- : Use a tool to scoop up solid or absorbed material and place into appropriate labelled waste container. Avoid all possible sources of ignition (spark or flame). Avoid creating dusty conditions and prevent wind dispersal.

**Note:** see section 8 for personal protective equipment and section 13 for waste disposal.

## 7. Handling and storage

- Handling** : Avoid creating dust when handling and avoid all possible sources of ignition (spark or flame). Avoid contamination by any source including metals, dust and organic materials.
- Storage** : Store and use away from heat, sparks, open flame, or any other ignition source. Avoid contact with combustible materials. Prevent moisture pick-up in handling and storage.
- Packaging materials Recommended** : Use original container.

## 8. Exposure controls/personal protection

**Occupational exposure limits** : Total inhalable dust - 10 mg/m<sup>3</sup>

Respirable dust - 5 mg/m<sup>3</sup>

### Exposure controls

- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates 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.  
Recommended: If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist.
- Hand protection** : Chemical-resistant, impervious gloves or gauntlets complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.: PVC , butyl rubber , nitrile rubber , natural rubber (latex)
- Eye protection** : Recommended: Use dust goggles if high dust concentration is generated.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved.  
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.

## 9. Physical and chemical properties

### General information

#### Appearance

**Physical state** : Solid.

### Important health, safety and environmental information

**pH** : 3 to 6 [Conc. (% w/w): 1%]

**Melting/freezing point** : >170°C (338°F)

**Density (g/cm<sup>3</sup>)** : 0,8 to 1,3 g/cm<sup>3</sup>

**Solubility** : Easily soluble in the following materials: cold water, hot water

## 10. Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see section 7).
- Materials to avoid** : Reactive or incompatible with the following materials: reducing materials, combustible materials, organic materials and acids.
- Hazardous decomposition products** : These products are  
carbon oxides  
nitrogen oxides  
sulfur oxides  
phosphorus oxides  
metal oxide/oxides

## 11. Toxicological information

### Potential acute health effects

Adverse health effects are considered unlikely, when the product is used according to directions.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	References
Potassium nitrate	LD50 Oral	Rat	3540 mg/kg	VCVN5* - ,49,1993
	TDL0 Oral	Rat	10 mg/kg	VCVN5* - ,49,1993

## 11. Toxicological information

- Chronic effects** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

- Inhalation** : No specific data.  
**Ingestion** : No specific data.  
**Skin** : No specific data.  
**Eyes** : No specific data.

## 12. Ecological information

- Environmental effects** : No known significant effects or critical hazards.

### Aquatic ecotoxicity

Product/ingredient name	Test	Result		Species	Exposure	References
Potassium nitrate	LC50	490	mg/L	Daphnia - Water flea - Daphnia magna	48 hours	J.Water Pollut.Control Fed. 37(9):1308-1316
	LC50	180	mg/L	Fish - Guppy - Poecilia reticulata	96 hours	Water Resour.Center Rep.No.490, Ohio State University, Columbus, OH:47 p.(U.S.NTIS PB-255721)

### Other ecological information

#### Biodegradability

- Conclusion/Summary** : The product does not show any bioaccumulation phenomena.

- Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations



- Methods of disposal** : Empty containers or liners may retain some product residues. Do not empty into drains; dispose of this material and its container in a safe way. Dispose of in accordance with all applicable local and national regulations

### Waste classification



- Hazardous waste** : This material and its container must be disposed of as hazardous waste.

## 14. Transport information

### International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
<b>ADR/RID Class</b>	UN1479	OXIDIZING SOLID, N.O.S. (Potassium nitrate)	5.1	III		<b>Hazard identification number</b> 50
<b>ADNR Class</b>	UN1479	OXIDIZING SOLID, N.O.S. (Potassium nitrate)	5.1	III		-

## 14. Transport information

<b>IMDG Class</b>	UN1479	OXIDIZING SOLID, N.O.S. (Potassium Nitrate)	5.1	III		<b>Emergency schedules (EmS)</b> F-A,S-Q
<b>IATA-DGR Class</b>	UN1479	OXIDIZING SOLID, N.O.S. (Potassium Nitrate)	5.1	III		-

## 15. Regulatory information

### EU regulations

**Hazard symbol or symbols**



Oxidising

**Risk phrases** : R8- Contact with combustible material may cause fire.

**Safety phrases** : S17- Keep away from combustible material.  
S41- In case of fire and/or explosion do not breathe fumes.

**Product use** : Industrial applications.

Classification and labelling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use.

**Product use** : Fertilizer Applications.

## 16. Other information

**Full text of R-phrases referred to in sections 2 and 3 - Europe** : R8- Contact with combustible material may cause fire.

**Full text of classifications referred to in sections 2 and 3 - Europe** : O - Oxidising

**References** : European Chemical Bureau, Annex 1 EU Directive 67/548/EEC  
National Institute for 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

### History

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**Version** : 1

**Prepared by** : Yara Product Classification and Regulations

 Indicates information that has changed from previously issued version.

### Notice to reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

## 16. Other information

Version 1

Page: 6/6