



# SAFETY DATA SHEET

12-24-12 (NPK 12-10,5-10) (PKEUYG)

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name : 12-24-12 (NPK 12-10,5-10) (PKEUYG)  
Product code : PKEUYG  
Product type : solid (granulates )

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Industrial manufacture / import - continuous synthesis. Industrial manufacture / import - batch synthesis. Industrial manufacture / import -bulk transfer. Industrial manufacture / import - laboratory analysis. Industrial distribution.

Uses advised against : None identified.

### 1.3 Details of the supplier of the safety data sheet

Yara Suomi Oy  
Uudenkaupungin tehtaat  
**Address**  
Street : Hangontie  
Postal code : 23501  
City : Uusikaupunki  
Country : Finland

#### P.O. Box Address

P.O. Box : PL 5  
Postal code : 23501  
City : Uusikaupunki  
Country : Finland

Telephone number : +358 (0)10 215 111  
Fax no. : +358 (0)10 215 3000  
e-mail address of person responsible for this SDS : sds.finland@yara.com  
Business ID : 0948865-5

### 1.4 Emergency telephone number

#### National advisory body/Poison Center

Name : Myrkytystietokeskus / Giftinformationscentralen  
Telephone number : +358 (0)9 471 977 (suora/direkt) / +358 (0)9 4711 (vaihe/via växel)

Other hazards which do not result in classification : Product forms slippery surface when combined with water.

**SECTION 3: Composition/information on ingredients**

Substance/mixture : Mixture

Product / ingredient name	Identifiers	%	67/548/EEC	Classification Regulation (EC) No.	Type
Ammonium nitrate	RRN: 01-2119490981-27 EC: 229-347-8 CAS : 6484-52-2	15 - 20	O: R8 Xi: R36	1272/2008 (CLP) Ox. Sol. 3 H272 Eye Dam./Irrit. 2 H319	[1]
dolomite	RRN: Not available. EC: 240-440-2 CAS : 16389-88-1	5 - 7	Not classified.	Not classified.	[2]
ammonium chloride	RRN: 01-2119489385-24 EC: 235-186-4 CAS : 12125-02-9 Index: 017-014-00-3	1 - 2	Xn: R22 Xi: R36	Acute Tox. 4 H302 Eye Dam./Irrit. 2 H319	[3][2]

**Time**

- [1] Substance classified with a health or environmental hazard
  - [2] Substance with a workplace exposure limit
  - [3] PBT-substance
  - [4] vPvB-substance
- See Section 16 for the full text of the R phrases or H statements declared above.  
There are no 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.  
Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**Unsuitable extinguishing media** : 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 or mixture** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
 nitrogen oxides  
 sulfur oxides  
 phosphorus oxides  
 halogenated compounds  
 metal oxide/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 for firefighters** : 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.

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

**Additional information** : Not available.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

**For 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. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised 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 "5 for non-emergency personnel".

**6.2. Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.

Recommendations : Not available.  
 Industrial sector specific solutions : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

#### Occupational exposure limits

Product / Ingredient name	Occupational exposure limits
dolomite	Tyoterveyslaitos (1998-06-01) Exposure limit 8 h 10 mg/m <sup>3</sup>
ammonium chloride	Tyoterveyslaitos (1998-06-01) Exposure limit 8 h 10 mg/m <sup>3</sup>

**Recommended monitoring procedures** : 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 protective 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.

#### Derived effect levels

Product / Ingredient name	Type	Exposure	Value	Population	Effects
Ammonium nitrate	DNEL	Long term Dermal	21.3 mg/kg bw/day	Workers	Systemic
Ammonium nitrate	DNEL	Long term Inhalation	37.6 mg/m <sup>3</sup>	Workers	Systemic
Ammonium chloride	DNEL	Long term Dermal	190 mg/kg bw/day	Workers	Systemic
Ammonium chloride	DNEL	Long term Inhalation	33.5 mg/m <sup>3</sup>	Workers	Systemic

#### Predicted effect concentrations

Product / Ingredient name	Type	Compartment Detail	Value	Method Detail
Ammonium nitrate	PNEC	Fresh water	0.45 mg/l	Assessment Factors
Ammonium nitrate	PNEC	Marine water	0.045 mg/l	Assessment Factors

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selected respirator.

**Environmental exposure controls** : Emissions from ventilation or work process equipment 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.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Appearance** : solid (granulates)

**Physical state** : Beige

**Color** : Odorless

**Odor** : Not determined

**Odor threshold** : > 4.5 [Conc.: 105 g/l]

**pH** : Decomposes: > 210 °C

**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

**Solubility(ies)** : Soluble in the following materials:  
cold water

**Partition coefficient: n-octanol/water** : Not determined

**Auto-ignition temperature** : Not determined

**Viscosity** : Dynamic: Not determined. Kinematic: Not determined.

**Explosive properties** : None

**Oxidizing properties** : None

**9.2 Other information**  
No additional information.

**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** : The product is stable.

**Sensitization**

**Conclusion/Summary**  
 Skin : No; sensitizing  
 Respiratory : Not sensitizing

**Mutagenicity**

**Conclusion/Summary** : No mutagenic effect.

**Carcinogenicity**

**Conclusion/Summary** : No carcinogenic effect.

**Teratogenicity**

**Conclusion/Summary** : No teratogenic effect.

**Reproductive toxicity**

Product / Ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure	References
Ammonium nitrate	-	Negative	Negative	Rat	Oral: > 1500 mg/kg bw/day	28 days	IJCLID 5
ammonium chloride	-	Negative	Negative	Rat	Oral: 1500 mg/kg bw/day	.	IJCLID 5

**Conclusion/Summary** : Not considered to be toxic to the reproductive system.  
**Information on the likely routes of exposure** : No known significant effects or critical hazards.

**Potential acute health effects**

**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Ingestion** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Eye contact** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Inhalation** : No specific data.

**Ingestion** : No specific data.

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**SECTION 12: Ecological information**

**12.1 Toxicity**

Product / ingredient name	Result	Species	Exposure	References
Ammonium nitrate				
	Acute LC50 447 mg/l Fresh water.	Fish	48 h	IUCLID 5
	Acute EC50 490 mg/l Fresh water.	Daphnia	48 h	IUCLID 5
	Acute EC50 1,700 mg/l Salt water.	Aquatic plants	10 d	IUCLID 5
ammonium chloride				
	Acute LC50 174 mg/l Marine water.	Fish	96 h	IUCLID 5
	Acute LC50 209 mg/l Fresh water.	Fish	96 h	IUCLID 5
	Acute EC50 101 mg/l Fresh water.	Daphnia	48 h	IUCLID 5
	Acute EC50 90,4 mg/l Marine water.	Aquatic plants	10 d	IUCLID 5
	Acute EC50 1,300 mg/l Fresh water.	Aquatic plants	5 d	IUCLID 5

**Conclusion/Summary** : No known significant effects or critical hazards.

**12.2 Persistence and degradability**

**Conclusion/Summary** : Readily biodegradable in plants and soils. The product does not show any bioaccumulation phenomena.

**12.3 Bioaccumulative potential**

**12.4 Mobility in soil**  
 Soil/water partition coefficient (KOC) : Not available.  
 Mobility : Not available.

**12.5 Results of PBT and vPvB assessment**  
 PBT : Not applicable.  
 vPvB : Not applicable.

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

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure

14.6 Additional information	: ADN
Marine pollutant	: No.
Regulation: IMDG	
14.1 UN number	: Not regulated.
14.2 UN proper shipping name	
14.3 Transport hazard class(es)	
Regulation: IATA	
14.1 UN number	: Not regulated.
14.2 UN proper shipping name	
14.3 Transport hazard class(es)	
Regulation: IMDG	
14.4 Packing group	: No.
14.5 Environmental hazards	: No.
14.6 Additional information	: No.
Marine pollutant	: Not applicable.
Special precautions for user	: Not applicable.
Regulation: IATA	
14.1 UN number	: Not regulated.
14.2 UN proper shipping name	
14.3 Transport hazard class(es)	
Regulation: IMDG	
14.4 Packing group	: No.
14.5 Environmental hazards	: No.
14.6 Additional information	: IATA
Marine pollutant	: No.
Special precautions for user	: Not applicable.

Remark : A NPK fertilizer not liable to self-sustaining decomposition according to the IMC-standard trough test as defined in the recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, 2, part II, section 38.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
Not applicable.

14.8 IMSBC

Proper shipping name : AMMONIUM NITRATE, BASED FERTILIZER (non-hazardous)  
Class : Not applicable.  
Group : C

**SECTION 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

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**Full text of classifications [CLP/GHS]**  
 H272 May intensify fire, oxidizer.  
 : Acute Tox. 4 ACUTE TOXICITY ORAL Category 4  
 Eye Dam./Irrit.2 SERIOUS EYE DAMAGE/ EYE  
 IRRITATION; Category 2  
 Ox. Sol.3 OXIDIZING SOLIDS Category 3  
**Full text of abbreviated R phrases**  
 : R8- Contact with combustible material may cause fire.  
 R22- Harmful if swallowed.  
 R36- Irritating to eyes.  
**Full text of classifications [DSD/DPD]**  
 : C - Oxidizing  
 Xn - Harmful;  
 Xi - Irritant  
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 Prepared by : Yara Product Classifications & Regulations.

[!] Indicates information that has changed from previously issued version.

**Notice to reader**

To the best of our knowledge, the information provided in this Safety Data Sheet is accurate as at the date of its issue. The information it contains is being given for safety guidance purposes and relates only to the specific material and uses described in it. This information does not necessarily apply to that material when combined with other material(s) or when used otherwise than as described herein, since all materials may represent unknown hazards and should be used with caution. Final determination of the suitability of any material is the sole responsibility of the user.

