

Safety data sheet according to 1907/2006/EC (REACH)

Printing date 31.01.2017

Rev. n. 1

Revision: 31.01.2017

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

- **1.1 Product identifier**
 - Trade name: **PURO N**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 - **Sector of Use**
 - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
 - SU21 Consumer uses: Private households / general public / consumers
 - **Product category** PC12 Fertilisers
 - **Application of the substance / the mixture** Fertiliser
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
SARION s.r.l.
Via C. Armellini, 22
04100 Latina
Tel +39 392 93 64 476
www.sarion.com
 - **Further information obtainable from:** SARION s.r.l. - Email: regulatory@sarion.com
- **1.4 Emergency telephone number:**
UNITED KINGDOM
National Poisons Information Service (NPIS) - Tel: +44 844 8920111

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
Eye Irrit. 2 H319 Causes serious eye irritation.
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
 - **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**
H319 Causes serious eye irritation.
- **Precautionary statements**
 - P101 If medical advice is needed, have product container or label at hand.
 - P102 Keep out of reach of children.
 - P280 Wear eye protection / face protection.
 - P264 Wash thoroughly after handling.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P337+P313 If eye irritation persists: Get medical advice/attention.
- **2.3 Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.



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SECTION 3: Composition/information on ingredients

3.2 Mixtures

· **Description:** Mixture: consisting of the following components.

· Dangerous components:

CAS: 6484-52-2 EINECS: 229-347-8 Reg.nr.: 01-2119490981-27-XXXX	ammonium nitrate	⚠ Ox. Sol. 1, H271; ⚠ Eye Irrit. 2, H319	25-50%
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· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Generally the product does not irritate the skin.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Protect unharmed eye.

· **After swallowing:** Do not induce vomiting; call for medical help immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

· Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

5.3 Advice for firefighters

· **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Not required.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Store in cool, dry place in tightly closed receptacles.
- **Information about fire - and explosion protection:**
No special measures required.
The product is not flammable.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
Keep container tightly sealed.
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs		
CAS: 6484-52-2 ammonium nitrate		
Dermal	DNEL / Long Term exposure - Systemic effects	21.3 mg/kg bw/d (workers)
Inhalative	DNEL / Long Term exposure - Systemic effects	37.6 mg/m ³ (workers)
· PNECs		
CAS: 6484-52-2 ammonium nitrate		
PNEC / aqua	0.45 mg/l (freshwater)	
	4.5 mg/l (intermittent releases)	
	0.045 mg/l (marine water)	
PNEC / STP	18 mg/l (sewage treatment plant)	

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Do not eat or drink while working.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Ensure that washing facilities are available at the work place.
 - **Respiratory protection:** Not required.
 - **Protection of hands:**
Preventive skin protection by use of gloves is recommended.



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the

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resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

Goggles recommended during refilling

- **Body protection:** Light weight protective clothing

SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

· Form:	Fluid
· Colour:	Orange
· Odour:	Characteristic
· Odour threshold:	Not determined.

- **pH-value at 20 °C:** 6.6

- **Change in condition**

- **Melting point/freezing point:** Undetermined.
- **Initial boiling point and boiling range:** Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:**

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

- **Lower:** Not determined.
- **Upper:** Not determined.

- **Vapour pressure:** Not determined.

· Density at 20 °C:	1.24 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

- **Solubility in / Miscibility with**

- **water:** Fully miscible.

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

- **Viscosity:**

- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

- **Solvent content:**

- **VOC (EC)** 0.00 %

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- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

CAS: 6484-52-2 ammonium nitrate

Oral	LD50	2950 mg/kg (rat) (OECD TG 401: Acute Oral Toxicity)
Dermal	LD50	> 5000 mg/kg (rat) (OECD TG 402: Acute Dermal Toxicity)

- **Primary irritant effect:**

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
 - Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
 - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - **Carcinogenicity** Based on available data, the classification criteria are not met.
 - **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
 - **Aquatic toxicity:**
 - No further relevant information available.

CAS: 6484-52-2 ammonium nitrate

EC50 / 48h	490 mg/l (crustacea - Daphnia magna)
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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.
 - **Uncleaned packaging:**
 - **Recommendation:**
Disposal must be made according to official regulations.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

- | | |
|---|--|
| · 14.1 UN-Number
· ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · UN "Model Regulation": | Void |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals)
Regulation (EC) No 1272/2008 (CLP - Classification, Labelling and Packaging of substances and mixtures)
Compilation of Safety Data Sheet: Reg.UE n. 830/2015 (amending Reg.EC n.1907/2006, Annex II)
 - **Directive 2012/18/EU (Seveso)**
 - **Named dangerous substances - ANNEX I ammonium nitrate**
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H271 May cause fire or explosion; strong oxidiser.
- H319 Causes serious eye irritation.

· **Abbreviations and acronyms:**

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Classification, Labelling and Packaging

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

TLV: Threshold Limit Value

TLV-TWA: Threshold Limit Value - Time Weighted Average

TLV-STEL: Threshold Limit Value - Short Term Exposure Limit

IOELV: Indicative Occupational Exposure Limit Value

BEI: Biological Exposure Indices

LD50: Lethal Dose, 50 percent

LC50: Lethal Concentration, in air, 50 percent

LC50: Lethal Concentration, 50 percent

EC50: Effective Concentration, 50 percent

ErC50: Effective Concentration, 50 percent, reduction of growth rate

Kow: Octanol-Water partition coefficient

BCF: BioConcentration Factor

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration [REACH]

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

WGK: Wassergefährdungsklasse - Water hazard class, Germany

Ox. Sol. 1: Oxidizing solids - Category 1

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2