



## 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: **FUERZA**
- **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**  
The product is not classified according to the CLP regulation.
- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
- **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
  - **Description:** Mixture: consisting of the following components.

- **Dangerous components:**

CAS: 7757-79-1 EINECS: 231-818-8 Reg.nr.: 01-2119488224-35-0029	potassium nitrate	Ox. Sol. 3, H272	2.5-5%
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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**
  - **General information:** No special measures required.
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:**  
Generally the product does not irritate the skin.

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- *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.*
- **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.  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.*
- **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.*

### 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:** *Store in a cool location.*
  - **Information about storage in one common storage facility:** *Not required.*
  - **Further information about storage conditions:** *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.*

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· **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: 7757-79-1 potassium nitrate**

Oral	DNEL / Long Term exposure - Systemic effects	12.5 mg/kg bw/d (general population)
Dermal	DNEL / Long Term exposure - Systemic effects	12.5 mg/kg bw/d (general population) 20.8 mg/kg bw/d (workers)
Inhalative	DNEL / Long Term exposure - Systemic effects	10.9 mg/m <sup>3</sup> (general population) 36.7 mg/m <sup>3</sup> (workers)

· **PNECs**

**CAS: 7757-79-1 potassium 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.

· **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 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:**



Safety glasses

Goggles recommended during refilling

### SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

· **Form:** Fluid

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· <b>Colour:</b>	Dark brown
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.
· <b>pH-value at 20 °C:</b>	5.9
· <b>Change in condition</b>	
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Initial boiling point and boiling range:</b>	Undetermined.
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Ignition temperature:</b>	
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 20 °C:</b>	1.23 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
· <b>water:</b>	Fully miscible.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	0.0 %
· <b>VOC (EC)</b>	0.00 %
· <b>9.2 Other information</b>	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.

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### 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: 7757-79-1 potassium nitrate

Oral	LD50	> 2000 mg/kg (rat) (OECD TG 425: Acute Oral Toxicity: Up-and-Down Proc)
Dermal	LD50	> 5000 mg/kg (rabbit) (OECD TG 402: Acute Dermal Toxicity)
Inhalative	LC50 / 4h	> 0.527 mg/l (rat) (OECD TG 403: Acute Inhalation Toxicity) No mortality, no lesion of pathological significance were observed at the maximum achievable breathing zone concentration (0.527 mg/L air). The acute median lethal concentration (LC50) of potassium nitrate was found to be greater than 0.527 mg/L air.

#### · Primary irritant effect:

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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: 7757-79-1 potassium nitrate

EC50 / 48h	490 mg/l (crustacea - Daphnia magna)
LC50 / 96h	1378 mg/l (fish - Oncorhynchus mykiss) (OECD TG 203: Fish, Acute Toxicity Test)

- **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.
- **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** Disposal must be made according to official regulations.

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |  |  |
|--|--|
| · <b>14.1 UN-Number</b><br>· ADR, ADN, IMDG, IATA                                | Void   |
| · <b>14.2 UN proper shipping name</b><br>· ADR, ADN, IMDG, IATA                  | Void   |
| · <b>14.3 Transport hazard class(es)</b><br>· ADR, ADN, IMDG, IATA<br>· Class    | Void   |
| · <b>14.4 Packing group</b><br>· ADR, IMDG, IATA                                 | Void   |
| · <b>14.5 Environmental hazards:</b>   | Not applicable.                                      |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable.                                      |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                                       | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | 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** potassium nitrate
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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**  
H272 May intensify fire; oxidiser.
- **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

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*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. 3: Oxidizing solids - Category 3*

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