



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Version number: 2

Revision date: 04.03.2013

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

- **1.1 Product identifier**

- Trade name: **AMMONIUM NITRATE SOLUTION 18-21% N**

- Article number: MS-030

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

- Application of the substance / the preparation Fertilizer

- **1.3 Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Fertilizers & Chemicals Ltd.

P.O.Box 1428, Haifa 31013, Industrial area Kiryat Ata

Israel.

- **Further information obtainable from:**

Safety Department:

Tel: +972-4-8468407/406

Fax number: +972-4-8468360

- **1.4 Emergency telephone number:**

Tel: +972-4-8468222, +972-4-8468229

Fax: +972-4-8468110

Tel: +972-4-8468178/179

Fax number: +972-4-8468296

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.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.

- **Information concerning particular hazards for human and environment:**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **2.2 Label elements**

- **Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.2 Chemical characterization: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

(Contd. on page 2)

EU

**Safety data sheet**
according to 1907/2006/EC, Article 31

Printing date 07.03.2013



Version number: 2

Revision date: 04.03.2013

Trade name: AMMONIUM NITRATE SOLUTION 18-21% N

(Contd. of page 1)

- Dangerous components:

CAS: 6484-52-2 EINECS: 229-347-8	ammonium nitrate	 O R8-9  Ox. Sol. 1, H271	50-60%
-------------------------------------	------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------

- Non-Dangerous components:

CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity		40-50%
-------------------------------------	-----------------------------------------------------	--	--------

- Additional information: For the wording of the listed risk phrases refer to section 16.**4 First aid measures****- 4.1 Description of first aid measures****- General information:**

Take affected persons out into the fresh air.
Do not leave affected persons unattended.
Safety showers and eye wash facilities should be provided.

- After inhalation: Supply fresh air; consult doctor in case of complaints.**- After skin contact:**

Generally the product does not irritate the skin.
Immediately wash with water and soap and rinse thoroughly.
Change contaminated clothing immediately. Rinse with plenty of water for at least 20 minutes.

- After eye contact: Rinse opened eye for 15 minutes under running water. Then consult a doctor.**- After swallowing:**

Drink plenty of water and provide fresh air. Call for a doctor immediately.
Induce vomiting and call for medical help.
NOTE: Never give an unconscious person anything to drink.

- 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.

5 Firefighting measures**- 5.1 Extinguishing media****- Suitable extinguishing agents:**

Use plenty of water. Prevent molten or dissolved fertilizer to run into drains or watercourses.

- For safety reasons unsuitable extinguishing agents:

Carbon dioxide
Do not use chemical extinguishers or foams or attempt to smother the fire with steam or sand.

- 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.
Non combustible but substance has oxidizing properties and might support combustion in the absence of oxygen.
Spontaneous ignition at moderately elevated temperatures can occur when ammonium nitrate is mixed with combustible materials or reducing agents. Contact with oxidizable substance may cause extremely violent combustion.

- 5.3 Advice for firefighters**- Protective equipment:**

Wear self-contained respiratory protective device.
Wear fully protective suit.

EU

(Contd. on page 3)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Version number: 2

Revision date: 04.03.2013

Trade name: AMMONIUM NITRATE SOLUTION 18-21% N

(Contd. of page 2)

6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Do not inhale vapor/aerosols.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear chemical suit, rubber boots and rubber gloves

- 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.

7 Handling and storage

- 7.1 Precautions for safe handling No special measures required.**- Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect from heat.

- 7.2 Conditions for safe storage, including any incompatibilities**- Requirements to be met by storerooms and receptacles:**

Store in a cool, dry, well ventilated place in tightly closed receptacles.

For quality reasons: Keep out of reach of direct sunlight.

Temperature should be above 10°C to keep solution liquid. Store separately from flammable liquids, oils, and oxidizable materials. Do not store Storage should be designed for the safe release of pressure. Floor drains and recesses should be plugged or eliminated to prevent entrapment of solution. Do not allow solution to dry.

- Information about storage in one common storage facility:

Store away from flammable substances.

Store away from reducing agents.

Do not store together with combustible materials.

- Further information about storage conditions: None.**- 7.3 Specific end use(s)** No further relevant information available.

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.

- Additional information:Ventilation must be sufficient to maintain TLV-TWA below 3 mg/m³, respirable particles, and 10 mg/m³, inhalable particles [ACGIH recommendation for particles (insoluble or poorly soluble). Not Otherwise Specified (PNOS)]

The lists valid during the making were used as basis.

(Contd. on page 4)

-EU

**Safety data sheet**
according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Version number: 2

Revision date: 04.03.2013

Trade name: AMMONIUM NITRATE SOLUTION 18-21% N

(Contd. of page 3)

- 8.2 Exposure controls**- Personal protective equipment:****- General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- Respiratory protection:

None required under normal conditions.

Wear appropriate NIOSH/MSHA – approved respirator.

- Protection of hands:

Protective gloves

- Material of gloves

Rubber gloves

PVC gloves

- 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

Face protection

- Risk management measures

Personal protection information shown in section 8 is based upon general information as to normal uses and conditions.

Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

9 Physical and chemical properties**- 9.1 Information on basic physical and chemical properties****- General Information****- Appearance:****Form:**

Liquid

Colour:

Colourless

- Odour:

Ammonia-like

- Odour threshold:

Not determined.

- pH-value at 25°C:

6,5-7,5

- Change in condition**Melting point/Melting range:**

Undetermined.

Boiling point/Boiling range:

Undetermined.

- Flash point:

Not applicable.

- Flammability (solid, gaseous):

Not applicable.

- Ignition temperature:

Not determined

(Contd. on page 5)

EU

**Safety data sheet**
according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Version number: 2

Revision date: 04.03.2013

Trade name: AMMONIUM NITRATE SOLUTION 18-21% N

(Contd. of page 4)

- Decomposition temperature:	210°C
- Self-igniting:	Product is not selfigniting.
- Danger of explosion:	Product does not present an explosion hazard.
- Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
- Vapour pressure:	Not determined.
- Density at 25°C:	1,25±0,02 g/cm ³
- Evaporation rate	Not determined.
- Solubility in / Miscibility with water:	Fully miscible. Salting out temperature: 10°C (60% solution-21%N) 0°C (51% solution-18%N)
- Segregation coefficient (n-octanol/water):	Not determined.
- Viscosity:	Not determined
- Solvent content:	
Organic solvents:	0,0 %
Water:	40-50 %
Solids content:	50-60 %
- 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity** Material is not reactive under normal conditions of use and storage
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
Decomposition will occur at elevated temperatures. Unstable if contaminated with oxidizable matter.
- **10.3 Possibility of hazardous reactions**
Reacts with strong acids and alkali.
Reacts with certain metals.
Acts as an oxidizing agent on organic materials such as wood, paper and fats.
- **10.4 Conditions to avoid**
Combustible materials
Source of ignition, heat, fire, high humidity, sparks.
To avoid decomposition do not overheat.
Store away from flammable substances.
- **10.5 Incompatible materials:**
Strong acids.
Reducing agents, organic combustible substances.
sawdust
Oils
- **10.6 Hazardous decomposition products:**
Ammonia

(Contd. on page 6)

EU



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Version number: 2

Revision date: 04.03.2013

Trade name: AMMONIUM NITRATE SOLUTION 18-21% N

Nitrogen oxides (NOx)

(Contd. of page 5)

11 Toxicological information

- 11.1 Information on toxicological effects

- Acute toxicity:

- LD/LC50 values relevant for classification:

6484-52-2 ammonium nitrate

Oral LD50 2217 mg/kg (rat)

- Primary irritant effect:

- **on the skin:** Might cause skin irritation to susceptible people.

- **on the eye:** Might cause eye irritation with susceptible people.

- **by Inhalation:** Inhalation might cause sensitization.

- by Ingestion:

Ingestion might cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Ingestion of large amount may cause systemic ammonia poisoning and nitrate poisoning.

- **Sensitization:** No sensitizing effects known.

- Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

The following applies to nitrates in general: may contribute to the eutrophication of water supplies.

Hazard for drinking water.

Fish: LC₅₀ >500 mg/l

- **12.2 Persistence and degradability** No further relevant information available.

- 12.3 Bioaccumulative potential

Nitrogen follows the natural nitrification/de-nitrification cycle to give nitrogen or nitrogen oxides.

- **12.4 Mobility in soil** No further relevant information available.

- Additional ecological information:

- General notes:

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.

13 Disposal considerations

- 13.1 Waste treatment methods

- **Recommendation** Smaller quantities can be disposed of with household waste.

(Contd. on page 7)

-EU-

**Safety data sheet**
according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Version number: 2

Revision date: 04.03.2013

Trade name: AMMONIUM NITRATE SOLUTION 18-21% N

(Contd. of page 6)

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- 14.1 UN-Number - DOT, ADR, ADN, IMDG, IATA	None
- 14.2 UN proper shipping name - ADR, ADN, IMDG, IATA - DOT	None NOT REGULATED FOR ROAD TRANSPORTATION
- 14.3 Transport hazard class(es) - ADR, ADN, IMDG, IATA - Class	None
- 14.4 Packing group - ADR, ADN, IMDG, IATA	None
- 14.5 Environmental hazards: - Marine pollutant:	No
- 14.6 Special precautions for user	Not applicable.
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
- UN "Model Regulation":	-

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to EU guidelines:**
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

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.

All information, recommendations and suggestions herein concerning our products are based upon tests and data believed to be reliable, however, it is the users responsibility to determine the safety, toxicity and suitability for his own use of the product described herein.

Since the actual use by others is beyond our control, no guarantee, expressed or impressed or implied is made by F&C, as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does F&C assume any liability arising out of the use, by others, of the product referred to herein.

Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or governmental regulation.

(Contd. on page 8)

EU



Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Version number: 2

Revision date: 04.03.2013

Trade name: AMMONIUM NITRATE SOLUTION 18-21% N

(Contd. of page 7)

- Relevant phrases

H271 May cause fire or explosion; strong oxidiser.

R8 Contact with combustible material may cause fire.

R9 Explosive when mixed with combustible material.

- Contact:

Dr. Dorit Canfi

Tel.: +972-4-8469554

Fax: +972-4-8469364

E-mail: canfi@tami-imi.icl-ip.com

- Abbreviations and acronyms:

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

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

NFPA: National Fire Protection Association (USA)

- * Data compared to the previous version altered.

- Reason for revision:

Update of classification information.

The product is not classified for transportation or for use.

EU